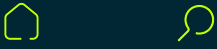


# Responsible Raw Materials Report

2024

VOLKSWAGEN GROUP



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## Disclaimer

This report is prepared by the Volkswagen Group companies and the respective brands ("legal entities") of the Working Group for the Responsible Raw Materials Due Diligence Management System (RMDDMS). These legal entities are Volkswagen AG, AUDI AG, Dr. Ing. h.c. F. Porsche AG, MAN Truck & Bus SE and Scania CV AB.



Within this Management System we have assigned the 18 priority raw materials to the aforementioned legal entities. Through this systematic approach, the Volkswagen Group companies are able to cover a broad range of raw materials and coordinate actions across the Volkswagen Group companies accordingly.

Although this report has been prepared in collaboration with and by the aforementioned legal entities, each single legal entity is only responsible for the content and described activities of the raw material for which it is in the lead (please see overview of the 18 priority raw materials → [on page 16](#) of this report).





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# Dear readers,

Mobility is changing rapidly worldwide. Our ambition as the Volkswagen Group is clear: we don't just want to accompany this era, we want to play a key role in shaping it — as “The Global Automotive Tech Driver”.

“The Group Strategy — Mobility for Generations” combines long-term goals with short-term agility. Ensuring sustainable business practices along the entire supply chain including key raw materials remains an important focus.

We identify, assess and mitigate sustainability risks through our Raw Materials Due Diligence Management System together with our Sustainability Procurement network of more than 110 experts across our brands and regions. In 2024, we prioritized 18 raw materials and their respective supply chains for in-depth analysis, with a focus on human rights due diligence and environmental protection.

During the reporting period, we increased our engagement with our key suppliers and their suppliers in upstream supply chains to enhance transparency and traceability. We also continued to work with business partners and stakeholders via initiatives on common standards and tools. We believe that it is only by working together that we can find solutions and build stable, resilient and sustainable supply relationships.

This report describes our approach and methodology, reports on our activities in 2024, and highlights our global efforts through on-the-ground projects. Now in its fifth edition, this report reflects our longstanding commitment established well before such reporting became a standard expectation. It outlines the progress we have made in terms of transparency and risk mitigation but also shows challenges we continue to face in our global, complex and fragmented supply chains.

In 2025 and beyond, we will continue to enhance our processes and systems and prepare for compliance with new sustainability legislation. Our focus will remain on driving common approaches such as standards and audits together with our partners and improving the effectiveness of our risk management. We will continue to learn as we go.

We hope you find this report informative and invite you to share your feedback with us at [sustainability@vwgroupsupply.com](mailto:sustainability@vwgroupsupply.com).

Further information on environmental, social and governance (ESG) topics is available on the Group's corporate website and in the [2024 Annual Report](#).

## Dirk Große-Loheide

Member of the Extended Executive Committee  
responsible for Group Procurement

Member of the Board of Management of the  
Volkswagen Brand responsible for procurement





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As one of the world's largest automotive manufacturers, the Volkswagen Group's global supply chains include more than 66,000 supplier locations in 95 countries around the world — a vast and complex network of relationships and logistics. We recognize the impact we have on people and the planet and our responsibility to be a leader in respect of human rights and the environment. Sustainability is an important element of our procurement strategy, and we are committed to responsible and transparent business conduct.

Our policy on sustainable materials is based on global normative guidelines, including in particular

- the UN Universal Declaration of Human Rights
- the Core Labour Standards of the International Labour Organization (ILO)
- the UN Guiding Principles on Business and Human Rights
- the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises
- the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
- the principles of the UN Global Compact.

The Volkswagen Group continuously monitors and adapts its risk management approach in procurement to meet the requirements of new laws and prepare for upcoming regulations at both the national and international level, such as the → [EU Battery Regulation \(EUBR\)](#) and the → [EU Deforestation Regulation \(EUDR\)](#).

We identify, assess and address the risks in our supply chains through our Responsible Supply Chain System and have recently prioritized 18 high-risk raw materials for more in-depth risk management through our Raw Materials Due Diligence Management System (RMDDMS).

## Responsible Supply Chain (ReSC) System

The Volkswagen Group's overarching approach to sustainability management in our supply chains is the Responsible Supply Chain (ReSC) system. This system includes regular risk analyses and proactive and reactive standard measures for our suppliers, such as the Code of Conduct for Business Partners, the Supply Chain Grievance Mechanism, media screenings, sensitization, the sustainability rating (S-Rating), and training for suppliers and employees.

While this is an important approach to preventing and minimizing human rights, social and environmental risks in the Volkswagen Group's supply chains, we recognize that many of the most severe human rights and environmental risks occur further upstream in the supply chain, particularly in the raw materials sector, where additional measures are necessary to mitigate risk. To address these risks, the RMDDMS is embedded in the ReSC system as one of the in-depth measures that extend to the more remote tiers of the raw material supply chain.

The various procedures and measures included in the ReSC system are described in detail in our [🌐 2024 Annual Report \(pages 395–398\)](#). The Responsible Raw Materials Report 2024 focuses on progress made, the RMDDMS and our 18 priority raw materials.

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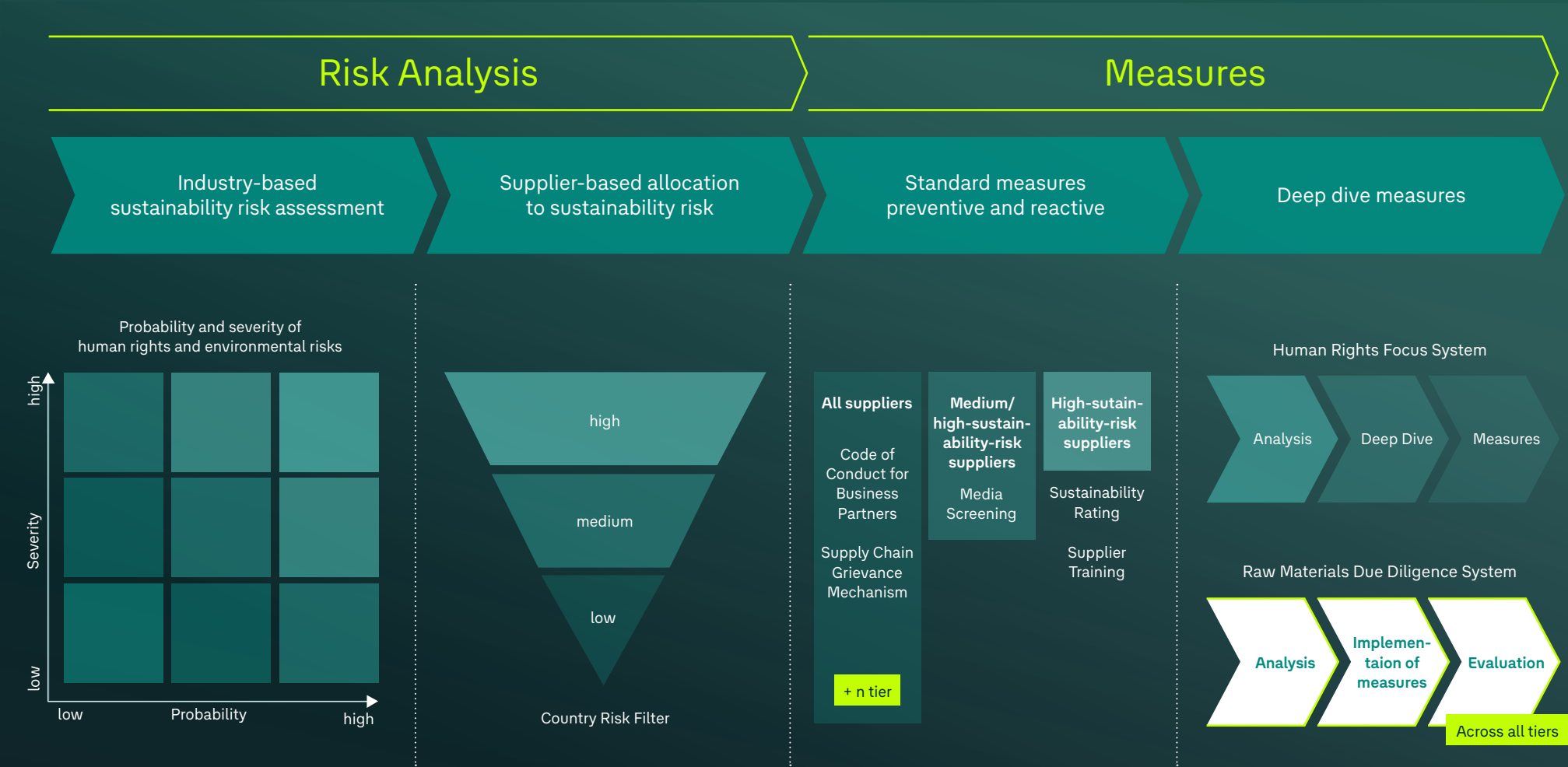
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Responsible Supply Chain (ReSC) System







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# Raw Materials Due Diligence Management System (RMDDMS)

The Volkswagen Group's supply chain is extremely complex, globally distributed and subject to constant change. One product's supply chain can have as many as nine tiers, and one single vehicle component can have several hundred suppliers and sub-suppliers. It is therefore essential that we take a risk-based approach and prioritize areas of focus in our due diligence efforts.

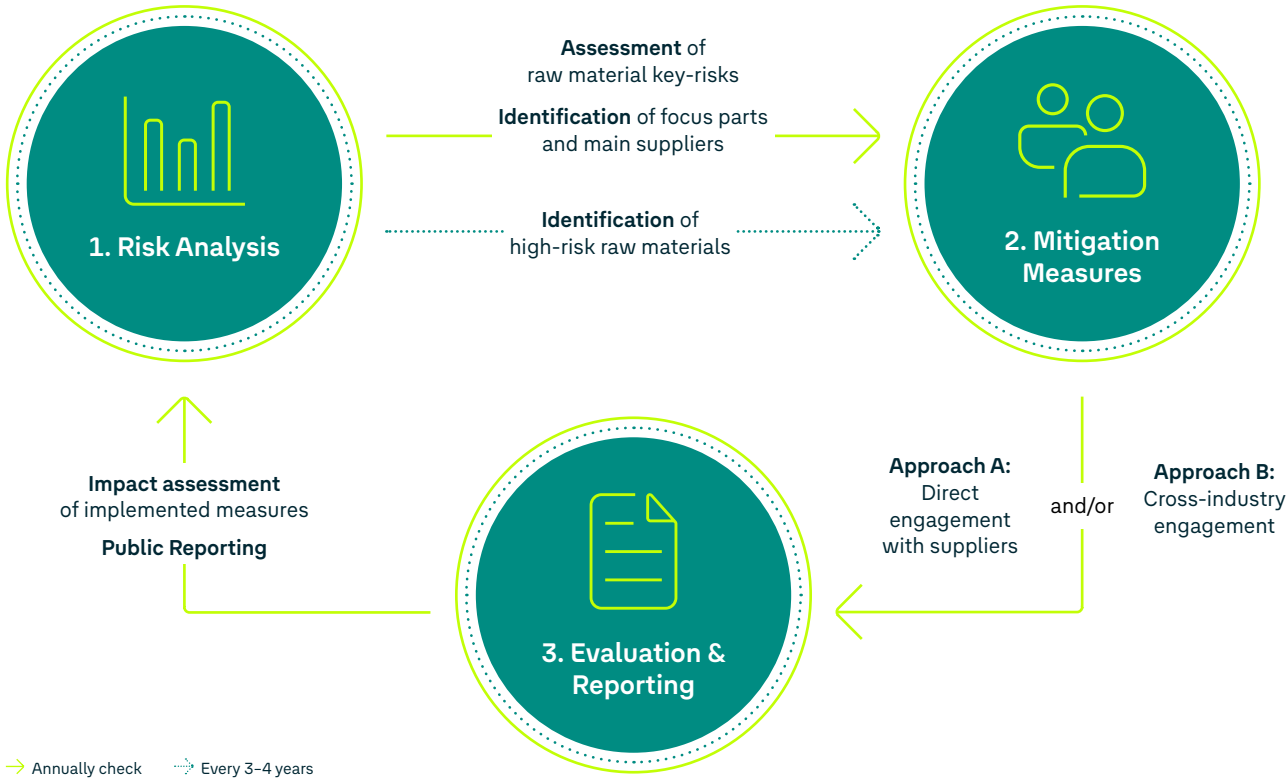
Within the Raw Material Due Diligence Management System (RMDDMS), activities focus on our direct suppliers as well as our upstream supply chain (n-tier level) for the 18 raw materials identified as high-risk priority raw materials.

The management system outlines the steps we take to identify, assess, prevent and mitigate actual and potential adverse effects in the supply chain. It also ensures that our sourcing activities do not contribute to conflict by indirectly supporting non-state armed groups in the extraction, transport, trade, handling or export of raw materials.

The RMDDMS strives to be in alignment with the requirements of the [OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas \(OECD Minerals Guidance\)](#), the OECD-FAO (Food and Agriculture Organization) Guidance for Responsible Agricultural Supply Chains, and the OECD Due Diligence Guidance for Responsible Business Conduct.

As a basis for the annual risk-based due diligence cycle, the Volkswagen Group has identified priority high-risk raw materials and their main applications. Raw-material-specific risk analyses are conducted annually for each of these priority materials. These are used to design and implement appropriate risk management measures (including analysis as well as preventive and reactive measures). The measures selected may relate to general risks in a specific raw material supply

## Raw material due diligence cycle



chain and its actors or may be supplier-specific. The progress and impact of mitigation measures are monitored, evaluated and reported internally and externally.

The RMDDMS was developed in 2020 to align with the five-step framework of the OECD Minerals Guidance. Its implementation provides a basis for the implementation of due diligence requirements such as the EUBR and the German Supply Chain Due Diligence Act (LkSG).

As the basis for our management approach, we have set out our goals and commitments with regard to our raw material supply chains in the [Volkswagen Group's Responsible Raw Materials Policy](#), which was reviewed and updated in 2024. The policy was extended to cover new legislation (e.g. EUBR) and now includes an additional commitment regarding the entire scope of raw materials and risks in the RMDDMS.



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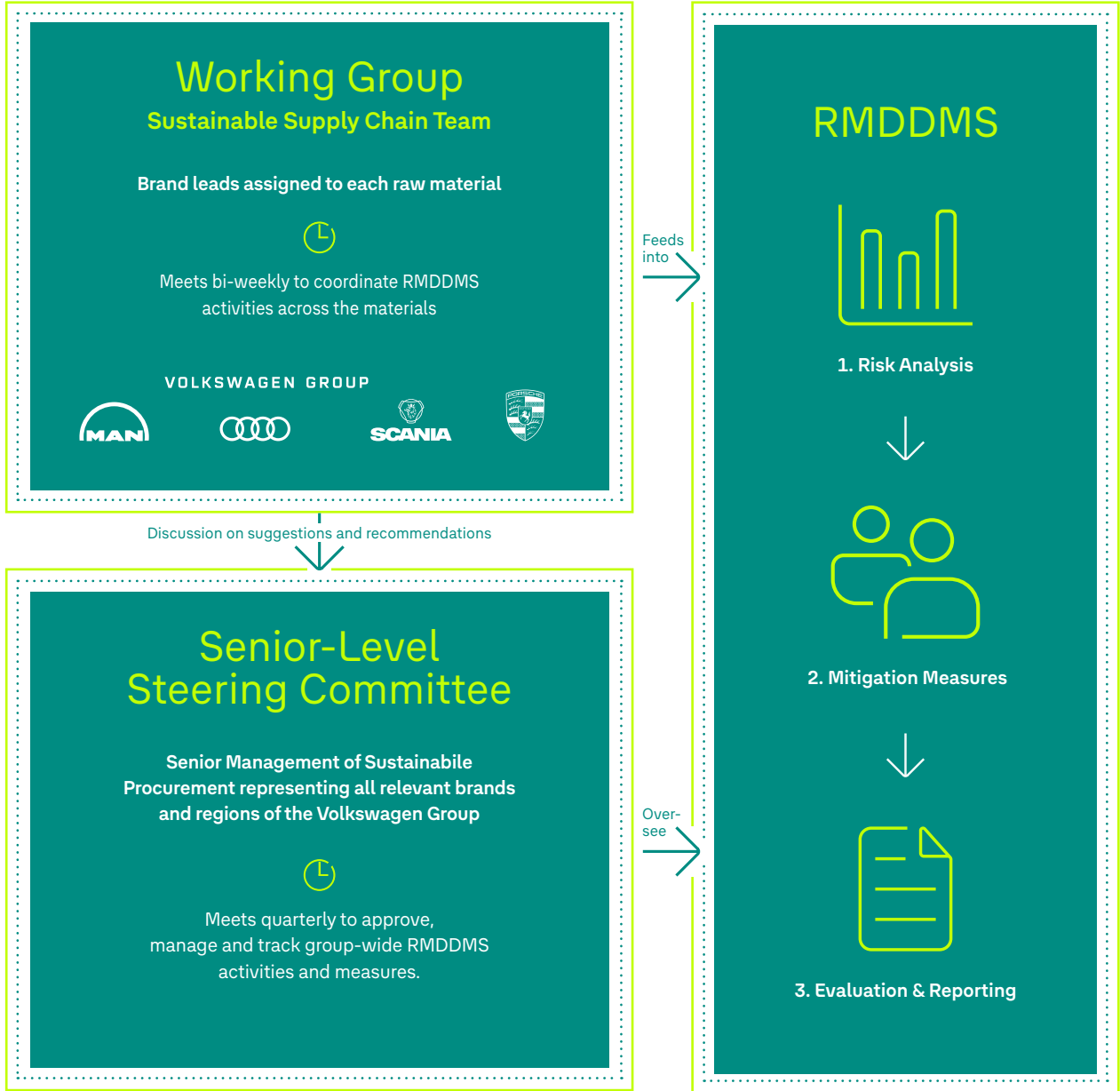
RMDDMS Governance

The processes and responsibilities of the RMDDMS are described in internal Volkswagen Group guidelines and handbooks, which are regularly updated, including in 2024.

In line with the OECD Minerals Guidance, the RMDDMS is overseen by a senior-level steering committee consisting of senior procurement sustainability managers from all relevant brands and regions of the Volkswagen Group, including the head of global supplier risk and sustainability management of Volkswagen Group Procurement. The steering committee meets quarterly to approve, manage and track RMDDMS activities and measures.

The Sustainable Supply Chain team, a working group consisting of sustainability managers from the procurement departments of Volkswagen Group brands, coordinates the due diligence activities. Each of the 18 identified priority materials is assigned to a “brand lead” to ensure in-depth knowledge and ongoing engagement with relevant suppliers and stakeholders for each of the raw materials. This brand lead is responsible for coordinating and implementing RMDDMS activities for the Volkswagen Group. During the reporting period, the working group met biweekly online and twice in person.

Driven by increasing regulatory expectations, we significantly enhanced our internal reporting and documentation over the reporting period. Our internal sustainability database collects sustainability information on our 18 priority materials and their supply chains, including risk analyses, sustainability ratings, grievance cases, mitigation measures and more. This information is automatically cross-checked with global media reports and sanction lists to identify areas for action. Results are reported to the steering committee on a regular and ad hoc basis.







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## Main Tools of the RMDDMS

While the challenges and approaches to solutions can vary greatly depending on the high-risk raw material in focus, there are a number of tools that are considered particularly useful in the context of the RMDDMS. These are presented below.

### Sustainability Requirements for Suppliers

As a general and mandatory component of Volkswagen Group's contracts with direct suppliers, we use a  **Code of Conduct for Business Partners (CoC BP)**, which sets out our expectations of business partners with regard to sustainability. The requirements cover key human rights, environmental, social and compliance standards; transparent and fair business relations; and due diligence for supply chains of minerals from conflict-affected regions. They are based on international standards as well as objectives, rules and policies of the Volkswagen Group. Our tier-1 suppliers are also requested to meet their due diligence obligations along their supply chains.

In 2019, we introduced a **sustainability rating (S-Rating)** for all relevant business partners and suppliers with a high sustainability risk. We use it to audit the sustainability performance of relevant suppliers and identify opportunities for continuous improvement. More information can be found in the  **2024 Annual Report (pages 403–404)**.

For selected high-risk raw materials, we use contractually binding **sustainability specification sheets** as a key component of our raw material due diligence. The specification sheets stipulate the way in which certain products must be manufactured, thus defining our raw-material-specific expectations of our suppliers with regard to human rights and the environment. For example, specification sheets can include requirements for supply chain transparency and the implementation of certain industry-specific sustainability standards (such as the → [Initiative for Responsible Mining Assurance, IRMA, standard](#)) at important pinch points in the supply chain.

Direct business partners who supply focus products containing any of the raw materials in scope are requested to comply with the specification sheets for all new contracts. However, we also strongly encourage our suppliers with existing contracts to comply with the specified requirements when we roll out individual specification sheets across the Volkswagen Group. We also expect our direct suppliers to pass on these requirements, in addition to the CoC BP, to their respective suppliers and up the supply chain.

To date, we have developed specification sheets for the following priority raw materials:

- **battery raw materials — lithium, cobalt, nickel and natural graphite** (rolled out across the Volkswagen Group in 2020, updated in 2023)
- **aluminum** (rolled out across the Volkswagen Group in 2023)
- **mica** (rolled out across the Volkswagen Group in 2023)
- **leather** (rolled out across the Volkswagen Group in 2023).

### Audits

Audits are one of the key tools used to assess risks in our upstream supply chains and to identify mitigation measures. They are utilized alongside other tools used for our raw material due diligence and help promote transparency, compliance, and a culture of continuous improvement and dialogue throughout the supply chain.

Due to the complexity and the large number of suppliers, the Volkswagen Group has established a tiered assessment system with different types of audits to systematically evaluate the sustainability performance of our suppliers.

**Second-party audits** on behalf of the Volkswagen Group are used at regular intervals or on a case-by-case basis to verify that our suppliers comply with our requirements. They are carried out by qualified auditors (internal or contracted

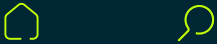
consultants). We conduct some of these audits as part of the S-Rating, while others are performed ad hoc, for example in response to a grievance case, and focus on human rights risks and social standards. On-site audits can identify gaps in supplier performance as well as risks at indirect suppliers' sites that need to be mitigated through the direct supplier. A Corrective Action Plan (CAP) is prepared following all audits of direct suppliers. Follow-up audits can be conducted to verify the effectiveness of the measures implemented.

Initially, the focus of the Volkswagen Group's battery audit program was on cobalt, due to the severity of the human rights risk associated with this mineral. From there, it was expanded to other raw materials used in batteries, and we worked our way up the supply chain, moving from our battery suppliers to precursors, refiners, processing plants and mines.

Because human-rights-related risks are often greatest at the beginning of the supply chain and can be most effectively addressed there, **third-party auditing and certification** form another part of our strategy. Several global initiatives offer voluntary audit-based certification for suppliers according to a standard set of requirements, including IRMA, the Aluminum Stewardship Initiative (ASI) and the Leather Working Group (LWG). The Volkswagen Group also uses **databases** with audits conducted by global initiatives — for example the Responsible Mineral Initiative's (RMI) list of RMI-conformant smelters. We also work directly with mine operators to certify mines through international associations.

Through a combination of these approaches, the Volkswagen Group can more effectively monitor its supply chains to ensure that they meet rigorous environmental and human rights standards.

This table provides an overview of how we use audits across various raw materials in our supply chains.



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Audits

	Tin   Tantalum   Tungsten   Gold	Cobalt	Leather	Aluminum	Mica	Battery Raw Material, PGMs
Audit standard	Responsible Minerals Assurance Process (RMAP) developed by the Responsible Minerals Initiative (RMI)	Customized standard developed by the Volkswagen Group with an external audit company. Draws on the OECD Minerals Guidance	Standard developed by the Leather Working Group (LWG)	ASI Performance and ASI Chain of Custody (CoC) Standard developed by the Aluminium Stewardship Initiative (ASI)	Global Workplace Standard for Mica Processors	Initiative for Responsible Mining Assurance (IRMA) Standard for Responsible Mining
Scope of risks assessed in the audit	Annex II risks as defined by the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas	Annex II risks (see column to the left), as well as occupational health and safety, and child labor	Business and operations management, environmental and social impact, occupational health and safety, compliance	ASI Performance Standard: 62 environmental, social and governance principles such as business integrity and transparency, water and bio-diversity and human and labor rights ASI CoC standard: requirements for a CoC material, including supply chain due diligence and material accounting	Environmental management system, occupational health and safety, fair labor practices	Environmental impact; Social Impact; Health and safety; Business integrity
Tier(s) that have been audited	Smelters and refiners	From battery cell supplier to treatment unit level	Tanneries	All stages of the aluminum supply chain	Mica processors	Mine sites

1. Find more information on audits related to the Sustainability Rating in the [2024 Annual Report \(pages 403–404\)](#).





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## Supplier Dialogues

We view collaboration as key to implementing due diligence along the supply chain. We can only effectively assess and manage human rights and environmental risks in our supply chains if we work together with our key suppliers and share a common understanding. To this end, the Volkswagen Group engages directly and on an ongoing basis with key suppliers of focus parts containing one or more of the 18 prioritized raw materials. We also offer them a wide range of support, including training and initiatives to participate in. Over the reporting period, collaboration with our key suppliers has intensified, with some meetings taking place on a monthly or biweekly basis to align on strategic issues such as evolving regulatory requirements, due diligence measures and efforts, and emerging risks.

## Collaboration with External Partners and International Initiatives

The Volkswagen Group also aims to address human rights risks in the upstream supply chain beyond its contractual relationships. To this end, we engage with various stakeholders as an exercise to increase our leverage while at the same time benefit from the learning and knowledge exchange. We take part in conferences and workshops and meet with NGOs, associations, local partners and media representatives. We see value in engaging with NGOs and community representatives at both the national and international level.

In addition, the Volkswagen Group and its brands are active members of a number of global initiatives, both cross-industry and raw-material-specific. Together with our partners, we aim to share knowledge; develop standardized risk assessment tools; and introduce standards for responsible raw material

supply chains in terms of human rights, the environment and compliance. We believe that these activities help us make progress toward transparent and sustainable supply chains and promote more responsible business practices around the world.

For a description of selected initiatives of which the Volkswagen Group is a member, see the section on participation in international initiatives on → [pages 18–21](#).

## Sustainability Training and Workshops

Another important tool is the systematic training of our suppliers and our own employees. Sustainability is an integral part of the skill profile of our entire Procurement staff. Sustainability training — delivered in web-based, online or face-to-face formats — covers topics such as corporate responsibility, legal frameworks and requirements, processes, and management systems. Part of this training is dedicated to the topic of sustainability in raw materials.

To support the continuous development of our suppliers, sustainability managers of Volkswagen Group Procurement also offered sustainability training courses and workshops for our suppliers at selected locations and online. Since 2020, we have also been offering voluntary human rights training for suppliers. We have also created an e-learning module on sustainability that is available to current suppliers in eight languages.

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## Supply Chain Grievance Mechanism

The Supply Chain Grievance Mechanism is an important component of responsible supply chain management. We use it to investigate breaches or suspected violations of the Code of Conduct for Business Partners by our direct or indirect suppliers. It is accessible via the hotline and channels of the [Volkswagen Group's Whistleblower System](#) and is open to all potentially affected stakeholders, whether employees of suppliers or representatives of local communities or civil society organizations. Reports can also be filed confidentially and anonymously. Through the grievance mechanism, we process concerns others have raised regarding negative human rights and environmental impacts in our supply chain and introduce appropriate measures, e.g. audits. In the event of serious breaches, suppliers can be blocked from awarding new contracts. More information and KPIs for 2024 can be found in our [2024 Annual Report \(page 403\)](#).



1 Excerpt from available options



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## Human Rights and Environmental Risks in Scope

We annually review our risk categories covered by the RMDDMS to reflect upcoming regulatory requirements such as the EU Battery Regulation and industry best practices. Following an update at the beginning of 2024, further small adjustments were made during the reporting period, which are reflected in the graphic below. The risks in scope are grouped into seven sub-categories in line with the European Sustainability Reporting Standards (ESRS): Environmental risks are grouped into the sub-clusters pollution, waste, water and biodiversity. Social risks are covered by the sub-clusters human rights and working conditions. The impact of supply chain activities on local communities is included in the sub-cluster communities' rights.



The risk categories are listed in abbreviated form in Section 04 of this report for every raw material.



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## Priority Raw Materials

For the 2024 reporting period, as in the previous year, the RMDDMS included a total of 18 priority raw materials. Following the OECD-compliant risk-based approach, we developed a methodology for selecting priority raw materials based on the severity of potential human rights and environmental impacts. We base our risk assessment on databases such as Maplecroft’s global risk data and raw-material-specific risk analyses as well as other reports that outline ESG risks in supply chains. In addition, we reviewed cases from our grievance mechanism and gathered relevant data through outreach to stakeholders such as NGOs and n-tier suppliers. We also considered our leverage in raw material supply chains and at times prioritized raw materials where we considered the risk less severe but where we had leverage and saw the opportunity to make an impact.

Battery Raw Materials

Lithium

VOLKSWAGEN GROUP

Cobalt

VOLKSWAGEN GROUP

Nickel

VOLKSWAGEN GROUP

Natural Graphite

VOLKSWAGEN GROUP

Conflict Minerals (3TG)

Tin

VOLKSWAGEN GROUP

Tantalum

VOLKSWAGEN GROUP

Tungsten


VOLKSWAGEN GROUP

Gold


VOLKSWAGEN GROUP

Other Raw Materials


Aluminum




Copper




Leather




Magnesium




Mica



Natural Rubber

VOLKSWAGEN GROUP  


PGM<sup>1</sup>



REE<sup>2</sup>

VOLKSWAGEN GROUP

Steel

VOLKSWAGEN GROUP

1 PGM — Platinum Group Metals  
2 REE — Rare Earth Elements

>20

Raw material experts  
across our group

Raw Material Lead Brands in RMDDMS are  
Volkswagen | Audi | Porsche | MAN | Scania

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## Limitations

2024 is the fifth year since the RMDDMS was introduced in the Volkswagen Group. During the reporting period, we have made improvements for each of the individual raw materials and taken steps to further strengthen and enhance our human rights and environmental risk management. While we are pleased with the progress we have made, we continue to face limitations and obstacles along the way.

### Navigating new regulatory requirements

In recent years, the European Union has introduced legislation on sustainable supply chains to encourage environmental preservation, social improvement and better governance. This includes the → [EU Battery Regulation \(EUBR\)](#) and the → [EU Deforestation Regulation \(EUDR\)](#). Both are important pieces of legislation that have the potential to accelerate due diligence efforts in our high-risk raw material supply chains, namely cobalt, lithium, nickel, natural graphite and natural rubber.

However, the implementation of the new requirements also presents significant challenges, as it requires extensive documentation and supply chain mapping for raw materials back to the point of origin (farm/mine site). In addition, we are seeing some late or incomplete guidance and unresolved regulatory issues that further complicate planning and execution within an overall ambitious timeline. To learn more about the detailed position of the automotive industry on the EUDR, please refer to the [position paper of VDA](#).

### Lack of a level international playing field

While due diligence expectations have increased at the EU and European national levels, legal requirements for businesses in many other regions are not evolving at the same pace. This places an increased burden on European companies and in some cases may even put EU buyers at a competitive disadvantage, as non-EU suppliers perceive the increased due diligence and documentation procedures as onerous. This is particularly concerning in cases where EU companies are highly dependent on a limited number of suppliers or supply regions or in scarce raw material markets.

### Challenges of multi-tiered global supply chains

In the reporting year, we intensified our efforts to achieve greater transparency within our supply chains and worked even more closely with our suppliers and sub-suppliers. The flow of sustainability and compliance information as well as risk assessment and mitigation activities still remains a challenge in fragmented and complex supply chains. It is particularly difficult to identify and manage the risks of upstream actors in more distant stages of the supply chains where the Volkswagen Group does not have a direct contractual relationship with the supplier. For example, we found that in some cases suppliers were unwilling to disclose the identity of their suppliers due to perceived antitrust and competition concerns.

### Limits of corporate influence and the role of governments

Some of the issues we face are beyond our control. As stated in the UN Guiding Principles on Business and Human Rights, governments are obliged to protect human rights, while businesses are obliged to respect them. Governments have a key role to play in creating an enabling environment for responsible business conduct. This includes ensuring good governance (e.g., combating bribery and corruption), enacting and enforcing relevant legal frameworks, and ensuring that the use of state security forces does not violate human rights. However, we are aware of the complex challenges governments face in trying to ensure and protect human rights and the environment.

The protection and respect of human rights in regions with artisanal and small-scale mining (ASM) is an example of such complexities relevant to the downstream sector. While ASM is associated with poor health and safety standards and child labor and may operate outside the formal economy with little or no regulation, it is an important source of income for a large number of people in the countries concerned. Eliminating poor labor and environmental conditions from global supply chains while not preventing the most vulnerable populations from improving their livelihoods is therefore a balancing act.

Given the limitations described and the scope of our raw material supply chains, we still have a lot of work to do. Nevertheless, we see that the concept of due diligence in raw material supply chains is becoming more widely accepted and that more actors in the supply chain are considering human rights and environmental risks. We remain committed to working with our direct suppliers and the industry as a whole to continue to make progress.



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The Volkswagen Group considers cooperation with other industry actors and participation in initiatives an important part of its approach to raw material due diligence. By engaging in initiatives, we can join forces to address human rights and environmental risks along the supply chains. Standards and audits have become increasingly important in identifying and mitigating risks. Several initiatives have developed effective due diligence standards for their raw materials and fields of activity and are working to encourage and help actors deeper in the supply chains to apply them to their operations.

The Volkswagen Group is involved in and takes a leading role in several initiatives focusing on sustainability along the supply chain. Some of them are cross-industry initiatives that concern a range of raw materials, while others are raw-material-specific.

In 2024, among other, more raw-material-specific initiatives, we continued our involvement in the following initiatives and took on an active role in several of their activities.

## Initiative for Responsible Mining Assurance (IRMA)

The Volkswagen Group is a committed member of the  **Initiative for Responsible Mining Assurance (IRMA)**. We also play an active role in the IRMA Buyers Group and the Mining Engagement Team.

IRMA is a multi-stakeholder alliance that advocates for more socially and environmentally responsible mining. It offers an independent assessment of mines according to comprehensive standards. The IRMA standards encompass


the protection of human rights, including the rights of local communities, corruption prevention, health protection measures, occupational safety and environmental protection.

The Volkswagen Group has committed to progressively applying the IRMA Standard for Responsible Mining in its battery supply chains, ensuring that, in high-risk regions, the sourcing of battery raw materials is restricted to material originating from mines that are audited according to the IRMA Standard. We have chosen the IRMA standard as our preferred mining assurance standard due to its strong emphasis on social consultation and its recognition of the concept of Free, Prior, and Informed Consent (FPIC).

The continued scaling of IRMA across the mining industry and raw material supply chains remains critical to ensuring the ability of the Volkswagen Group and other downstream brands to achieve their responsible sourcing goals. The number of mines interested in and committed to IRMA is increasing, but not all mines are on board yet. We remain committed to combined efforts to increase leverage.

In 2024, members of the Volkswagen Group's Sustainable Supply Chain team participated in two IRMA National Level Forums, one focused on lithium mining in Chile and one on Indonesia and the growing nickel industry. We also held a partner session with IRMA during the 17<sup>th</sup> OECD Forum on Responsible Mineral Supply Chains and attended other events such as training sessions. During the reporting year, IRMA and RMI decided to join forces and engaged in discussions on a partnership. The Volkswagen Group strongly welcomes this collaboration to create synergies and streamline approaches and work packages.

## Responsible Minerals Initiative (RMI)

 **The Responsible Minerals Initiative (RMI)** aims to promote the responsible sourcing of minerals to ensure that supply chains make a positive contribution to social and economic development worldwide. To this end, the RMI provides a range of tools, standards and resources. One example is the RMI's **Responsible Minerals Assurance Process (RMAP)**, which enables companies and their suppliers to determine which smelters and refiners have systems in place to responsibly source minerals in accordance with current global standards. The assessment is carried out by an independent third party.

Through the RMI, the Volkswagen Group joins forces with other partners, either along the supply chain or from other industries, to promote dialogue and build a common understanding of sustainability expectations and harmonized upstream and downstream due diligence tools. We help drive cross-industry solutions and collaborative efforts to collectively leverage and standardize tools.

In the reporting period, the Volkswagen Group used Material Insights as a risk radar tool to support the risk identification and due diligence process and continued to encourage suppliers to be assessed against RMI standards.

We participated in the RMI's Emerging Minerals Working Group, which brings together companies to map global value chains for sustainable transition, encourage suppliers to be assessed against a standard and use collective leverage where necessary to drive responsible business practices upstream. The Volkswagen group was also an active member





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of RMI's Gold Team which mirrors the activities of Emerging Minerals Working Group focusing on the gold value chain.

In addition, the Volkswagen Group has been actively involved in the process of updating the RMI's ESG assessment standard. The aim of this activity is to ensure that RMI's valuable tools remain state-of-the-art and fully comply with the most recent regulatory requirements, such as the due diligence obligations of the EU Battery Regulation.

## DRIVE Sustainability

The Volkswagen Group is a founding member of the industry-led initiative  **DRIVE Sustainability**, under the umbrella of CSR Europe. DRIVE Sustainability is a partnership of 16 leading automotive companies that are driving the transformation to a circular and sustainable automotive value chain by taking a unified stance in their engagement with suppliers, stakeholders and related sectors.

Within the Raw Materials Working Group, we are continuing the development of the  **Raw Material Outlook**. This platform is a key initiative within DRIVE Sustainability and provides automotive companies with a tool to analyze 20 critical raw material value chains by mapping stages and actors and identifying key ESG risks along the supply chain. In 2024, two new risk profiles were added: cobalt and natural rubber.

Another tool developed by the working group is the **Sustainability Assessment Questionnaire (SAQ)**, which is also used by the Volkswagen Group as a basis for our sustainability rating (S-Rating) assessment. This common questionnaire standard for evaluating sustainability aspects of suppliers is currently used by 16 of the member companies and is intended to improve efficiency through a standardized approach. In the reporting year, we supported the development of a specific Battery SAQ (BSAQ), which includes additional questions on ESG data according to the provisions of the new → [EUBR](#). The BSAQ has been adapted to encompass actors on all levels of the battery supply chain from tier 1 to tier n. An industry-wide rollout is planned for 2025.

**Drive+** is the sustainable supply chain platform for tier-1 automotive suppliers and supplier associations. Members can engage in a systematic dialogue with Drive Sustainability partners about common sustainability challenges to find joint solutions.

In the reporting year, we also participated in several external events together with DRIVE Sustainability and engaged with more than 50 stakeholders, including NGOs, trade unions, industry associations and suppliers.

Drive Sustainability and CSR Europe also work locally with a focus on setting up sustainability networks to strengthen responsible sourcing and due diligence practices in the battery value chain. An on the ground project with IndustriALL Global Union on human rights due diligence in the Indonesian battery supply chain took place in April 2024.

DRIVE Sustainability is an associate member of several initiatives for more sustainable, material-specific supply chains, among them the Global Platform for Sustainable Natural Rubber (GPSNR) and ResponsibleSteel.

For more details on our participation in raw-material-specific initiatives, please see the respective raw material snapshots in → [Section 04](#) of this report.

A full list of our membership and participation in industry groups and initiatives can be found in → [Annex II](#) at the end of this report.

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### PGM

Scania continued to support the Marikana Coalition in South Africa, providing children with education for a future beyond mining.

→ See also Raw Material Snapshot on PGM, page 60

### Mica

Together with the Responsible Mica Initiative's Community Empowerment Program, we helped nearly 180 villages in Jharkhand, India, aiming to eradicate child labor in mica mines through better access to education and income diversification programs.

→ See also Raw Material Snapshot on mica, page 54



### IRMA

As active participants in the IRMA Buyers Group, we participated in 2 IRMA National Level Forums, one focused on lithium mining in Chile and one on Indonesia and the growing nickel industry.

### Lithium

20 local stakeholders sign joint action plan of the „Responsible Lithium Partnership“ in Chile's Salar de Atacama Basin to manage and protect water resources.

→ See also Raw Material Snapshot on lithium, page 27

### Natural Rubber

As a founding partner of CASCADE, Porsche has committed to continue the project for another three years, helping even more smallholders in Sumatra, Indonesia to improve their livelihoods

→ See also Raw Material Snapshot on natural rubber, page 57



### DRIVE Sustainability

A dedicated working group has developed a Battery SAQ with questions on ESG topics, including the risk categories outlined in the EU Battery Regulation.

2

new risk profiles added to the Raw Material Outlook platform.





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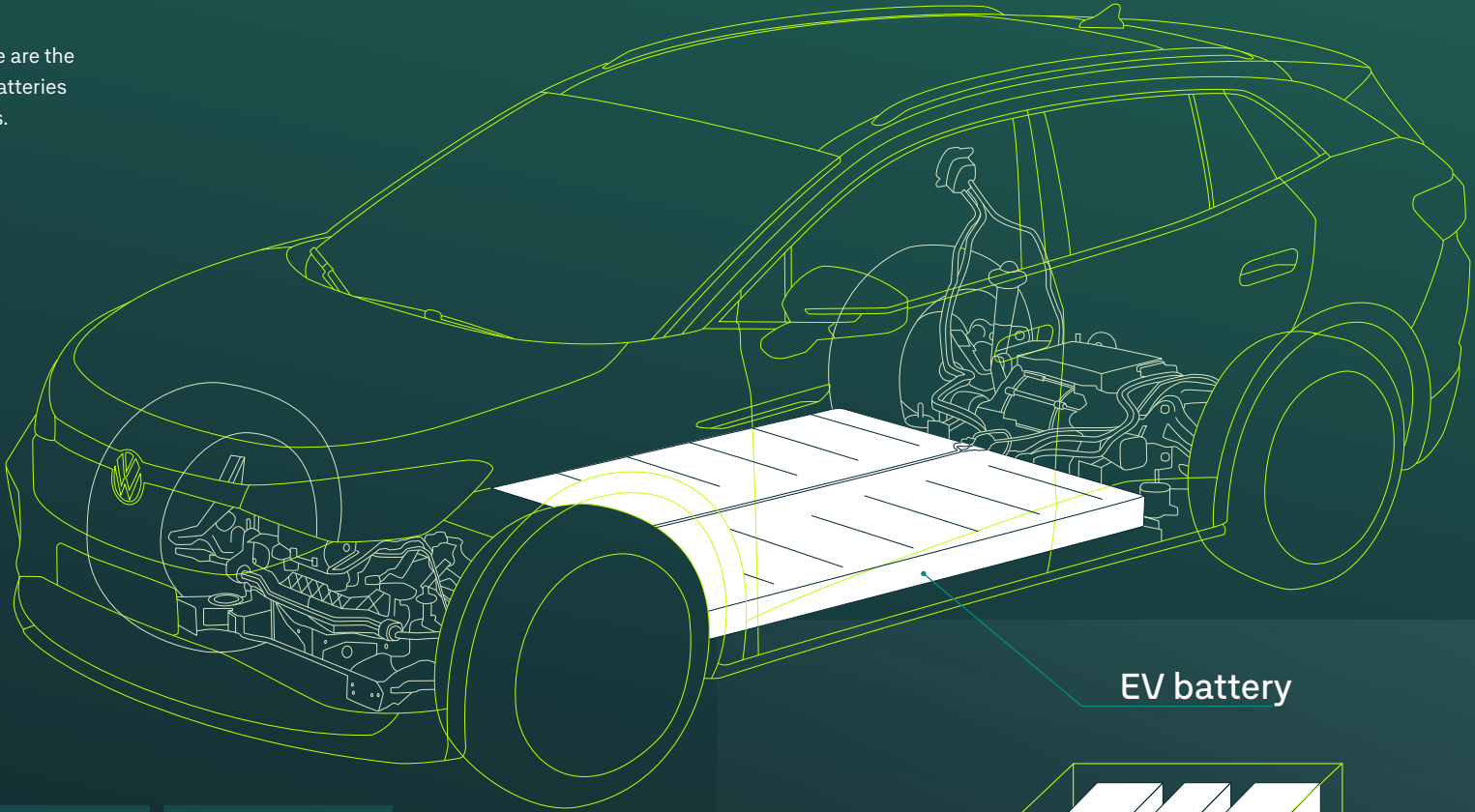
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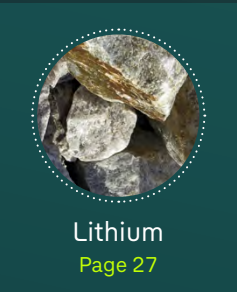
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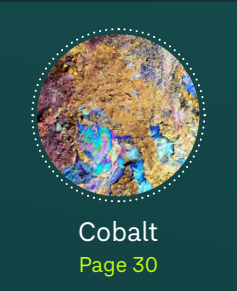
Lithium, nickel, cobalt and graphite are the key raw materials for lithium-ion batteries commonly used in electric vehicles.



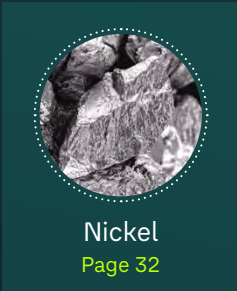
EV battery



Lithium  
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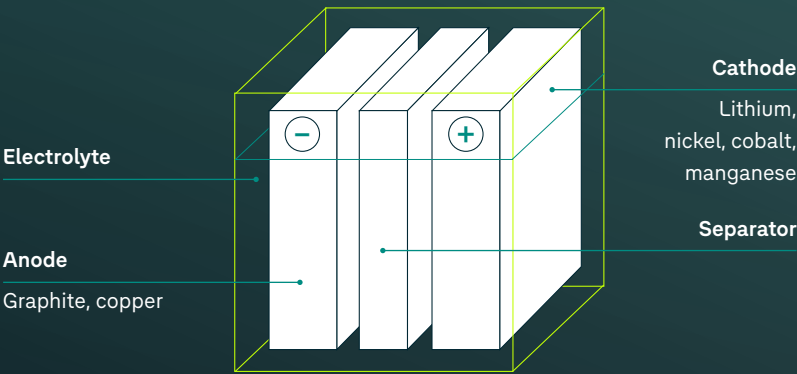
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Electrolyte

Anode

Graphite, copper

Cathode

Lithium,  
nickel, cobalt,  
manganese

Separator





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The Volkswagen Group is striving to become the number one provider of sustainable mobility worldwide. The electrification of our vehicle portfolio is an integral part of [The Group Strategy](#) and a key lever for decarbonization. As part of this strategic focus, there is a corresponding requirement to ensure sustainable business practices throughout the entire supply chain, including the key raw materials used to make lithium-ion electric vehicle (EV) battery cells: lithium, nickel, cobalt and natural graphite.

Therefore, we are taking a comprehensive joint due diligence approach for these battery raw materials, building on the foundations of our overall → [RMDDMS](#). The approach is designed to minimize the risk of any of our batteries' raw materials in our supply chain being linked to human rights abuses or other social or environmental risks and incorporates the due diligence requirements of the LkSG and the new EU Battery Regulation (EUBR).

## Battery Raw Materials in our Supply Chain

Given their strategic importance for the energy transition and their high supply risk, lithium, nickel, cobalt and natural graphite are listed by the EU as critical raw materials. In the reporting year, the Volkswagen Group did not directly source any battery raw materials. We bought battery cells from suppliers, which are themselves up to several steps away in the supply chain from the raw material origin. From 2025 onward, the Volkswagen Group will also source battery raw materials directly to supply its battery cell producer PowerCo (see → [page 26](#)).

For all battery raw materials, the Volkswagen Group manages sustainability topics via single points of contact for their key battery suppliers. The Sustainable Supply Chain team closely cooperates to prepare and coordinate due diligence processes for all such raw materials in accordance with the upcoming EU Battery Regulation.

## Preparing for the EU Battery Regulation (EUBR)

The EU Regulation concerning batteries and waste batteries (EU Battery Regulation) was adopted on July 12, 2023, and will replace the existing Batteries Directive dating from 2006. The EUBR aims to improve current regulations by making batteries used in the EU more environmentally friendly and increasing the lifespan of electronic devices used by consumers. The due diligence chapter of the regulation (chapter VII) will apply from August 18, 2025. In view of the expected growth in battery demand, the EU is imposing battery due diligence obligations on economic operators that make batteries available in the EU or that use them in their products. These obligations go beyond the voluntary efforts from actors in the battery supply chain that are already in place. Annex X of the EUBR provides a list of raw materials and risk categories to focus on when designing and implementing battery due diligence policies. The list of social and environmental risk categories is far more extensive than existing due diligence legislation.

To prepare for the new regulation, the Volkswagen Group has thoroughly reviewed the RMDDMS to ensure integration of battery due diligence and adapted internal processes and tools to comply with the EUBR, with a particular focus on chapter VII. However, sustainability was already a significant focus area in our battery supply chains, and our responsible sourcing practices before that

as well as a large part of our internal processes are already in line with the EUBR due diligence requirements.

In the reporting year, we set up a working group for battery due diligence and held regular meetings with our key battery suppliers to create a shared understanding of the scope of due diligence. Another priority area in 2024 was working with cross-industry initiatives to assess and improve the joint risk assessment and risk mitigation approach and to develop tools to facilitate compliance with the EUBR throughout the upstream supply chain, e.g., with RMI and Drive Sustainability. In 2025, we plan to continue our preparation, considering further guidelines to be provided by the EU. We will also continue our engagement with stakeholders at the mining level and in the countries of origin.



making batteries  
used in the EU  
more sustainable



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## Battery Specification Sheet

To ensure sustainable sourcing, we work closely with our key battery suppliers, for whom we use a mandatory EV battery raw material specification sheet as a key due diligence tool. It requests suppliers to provide supply chain transparency, which allows us to conduct a comprehensive social and environmental risk analysis, conduct mapping audits, and define and implement risk mitigation measures where necessary. We also ask our suppliers to adhere to internationally recognized responsible sourcing practices such as the OECD Due Diligence Guidance.

There is a corresponding requirement for suppliers to communicate these commitments to sub-suppliers and ensure sustainable business practices throughout their supply chains. All sub-suppliers up to the crude refiner level must undergo an independent audit by an industry body, such as the Responsible Minerals Initiative (RMI), or through an independent audit company that has been pre-approved by the Volkswagen Group. While we have noticed significant progress regarding the acceptance of such independent verification processes, especially for cobalt, some supply chain actors are not yet familiar with these processes, and additional capacity building is needed.

## Risk Assessment

EV batteries face raw material supply challenges, as lithium, nickel, cobalt and natural graphite reserves are in high demand globally but are also associated with social and environmental concerns. The battery supply chain includes several stages, from mining the metals to refining, processing to create cathodes and anodes, provide the inputs for battery cell production, and recycling (end of life). Around the world, mining of some battery metals has been linked to human rights abuses, including the use of child and forced labor. Many mines, particularly artisanal and small-scale mines

(ASM), fail to provide basic worker safety measures, and mining often comes at an environmental cost. The refining and processing of raw materials is currently highly concentrated in China. See the raw material dashboards on the following pages for more details on the countries of origin and the identified risks for the individual raw materials.

For risk assessment, we are continuing to collect supply chain data and progress with our **supply chain mapping and auditing** program. Furthermore, the Volkswagen Group has undertaken a broad sectoral analysis of the supply chains for battery raw materials and is leveraging media and supply chain monitoring solutions to actively monitor media attention to issues occurring along the battery supply chain.

Collaboration with our battery suppliers has intensified over the reporting period. We meet with some of our key suppliers on a bi-weekly or monthly basis to align on long-term strategic issues such as preparation for the legal requirements of the EUBR, to coordinate sub-supplier audits or to discuss emerging topics on an ad hoc basis. However, supply chain transparency remains a challenge, particularly in the more remote tiers.

## Risk Mitigation

The upstream supply chains for battery raw materials are complex and fragmented, with multiple social and environmental risks. Transparency and data availability therefore remain a challenge, as do frequent changes in supplier relationships.

Therefore, common **standards** are an important approach to mitigating risks and driving continuous improvement. The Volkswagen Group is a member of the Initiative for Responsible Mining Assurance (IRMA) and has chosen IRMA as its preferred mining assurance standard due to its strong emphasis on social consultation and its recognition of the concept of Free, Prior, and Informed Consent (FPIC). In

## Stakeholder Engagement

- Increased cooperation with our battery suppliers, support for the cascading of sustainability requirements down the supply chain
- Initial dialogue with tier-1 suppliers of PowerCo, including thorough, on-the-ground due diligence
- Ongoing engagement in initiatives to leverage joint standards and tools
- Engagement with experts and authorities on current developments and technologies
- Continuous exchange with NGOs

addition, the Volkswagen Group is engaged in several other industry initiatives such as the RMI and Drive Sustainability, as we believe these initiatives help to drive harmonization of the approaches to risk mitigation and to increase leverage and efficiency through joint measures. In 2024, we actively participated in working groups on battery raw materials and the adaptation of existing standards to the requirements of the EUBR.

We also conduct **supply chain audits** across all levels of our lithium, cobalt, nickel and natural graphite supply chains. For these, the Volkswagen Group has been working with external consultants since 2021 to help us verify upstream transparency information and better understand our suppliers' overall preparedness to comply with requirements or upcoming regulations. The audits are performed following a risk-based approach and cover compliance with the five-step framework of the OECD Due Diligence Guidance, including aspects such as forced and child labor, health and safety measures, and due diligence procedures. Where necessary, Corrective Action Plans (CAPs) are agreed on and closely monitored.



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In 2024, we conducted several audits at direct supplier locations, at cathode and anode manufacturers, refineries, and mine sites. Our Sustainable Supply Chain team was closely involved and observed some of the audits, which improved our understanding of the processes and due diligence management of our tier-1 suppliers. It was also a good opportunity to intensify the dialogue with our main battery suppliers. All of these activities are aimed at the continuous improvement of sourcing practices. The findings from the audits and consultations are incorporated into the audit questionnaire to improve future assessments.

In the reporting year, the Sustainable Supply Chain team of the Volkswagen Group participated in various training sessions and workshops on battery raw material supply chains, covering topics such as compliance requirements for the EUBR and supplier relations.

## Battery Recycling

To reduce our consumption of resources, the Volkswagen Group is working on a recycling concept for batteries, operating a pilot facility for recycling high-voltage vehicle batteries at the site in Salzgitter. In addition, we are exploring strategic partnerships in the battery value chain to comprehensively close the loop for high-voltage batteries. More information is available in the [2024 Annual Report \(page 334\)](#).

## PowerCo

The Volkswagen Group is one of the few automotive manufacturers around the world that is taking the battery as a core e-mobility technology into its own hands — from the procurement of raw materials to recycling. PowerCo, founded in 2022, vertically integrates the development and production of battery cells within the Volkswagen Group. Three sites for battery cell production are currently under construction: the main plant in Salzgitter, Germany (scheduled to start production in 2025), Valencia, Spain (2026), and St. Thomas, Canada (2027). All sites are consistently operated with electricity from renew-

able sources. More information is available in the [2024 Annual Report \(pages 281-282\)](#).

For the supply of raw materials, PowerCo relies on three mechanisms: long-term supply contracts, investments with partners in its own mines and procurement on the commodity markets. Because the Volkswagen Group is expected to cover more than half of its raw material requirements through PowerCo or purchase them directly in the future, the objective is to have a more direct lever for improving environmental and social conditions in the supply chain. The Group aims to maximize material use within production through close-to-production recycling of production surpluses (scrap and end-of-line). We want to drive the development of a strong, sustainable battery industry with strong roots in Europe and North America. In addition, the Volkswagen Group and PowerCo are also focusing on systematic end-of-life recycling and the use of recycled materials.

Since its start, PowerCo has already introduced the concept of the unified cell, founded a joint venture, IONWAY BV, with Belgian material technology group Umicore to produce cathodes, and introduced activities to secure the supply of raw materials. In the reporting period, PowerCo entered purchasing agreements with suppliers of battery raw materials that will begin supplying PowerCo in the coming years.

In preparation for the start of battery cell production, the Sustainable Supply Chain team of the Volkswagen Group is supporting PowerCo in assessing the social and environmental risks of potential direct suppliers of battery raw materials. During the reporting period, we performed desktop due diligence ESG pre-checks with a focus on mine sites for all battery raw materials as a standard process during the initial dialogue with potential suppliers. In high-risk contexts, during contract negotiations, we also performed comprehensive on-site due diligence facilitated by industry expert consultants. These assessments cover extensive human rights and environmental aspects in accordance with applicable legislation and international due diligence standards.

In high-risk countries, we strive to ensure that our raw material

## Outlook 2025

We plan to

- continue our robust engagement and close dialogue with our direct battery suppliers
- collect further information about the upstream supply chain and review the data with a raw material specific lens
- finalize the development and start to roll-out new tools for initial risk analysis and risk mitigation while prioritizing 3rd party solutions to reduce the burden at the supplier base
- improve our due diligence and mapping audit program to facilitate in-depth risk analysis
- work with cross-industry initiatives on standards and tools to facilitate compliance which align with the EUBR

suppliers only use lithium, cobalt, nickel and natural graphite from IRMA assessed mines. Following a supplier's commitment to obtaining IRMA assessment, we continuously monitor their progress and remain closely involved. One priority topic is the safe management of hazardous substances, including mining tailings. We also seek a contractual commitment to continuous improvement in order to increase the IRMA performance level over time.





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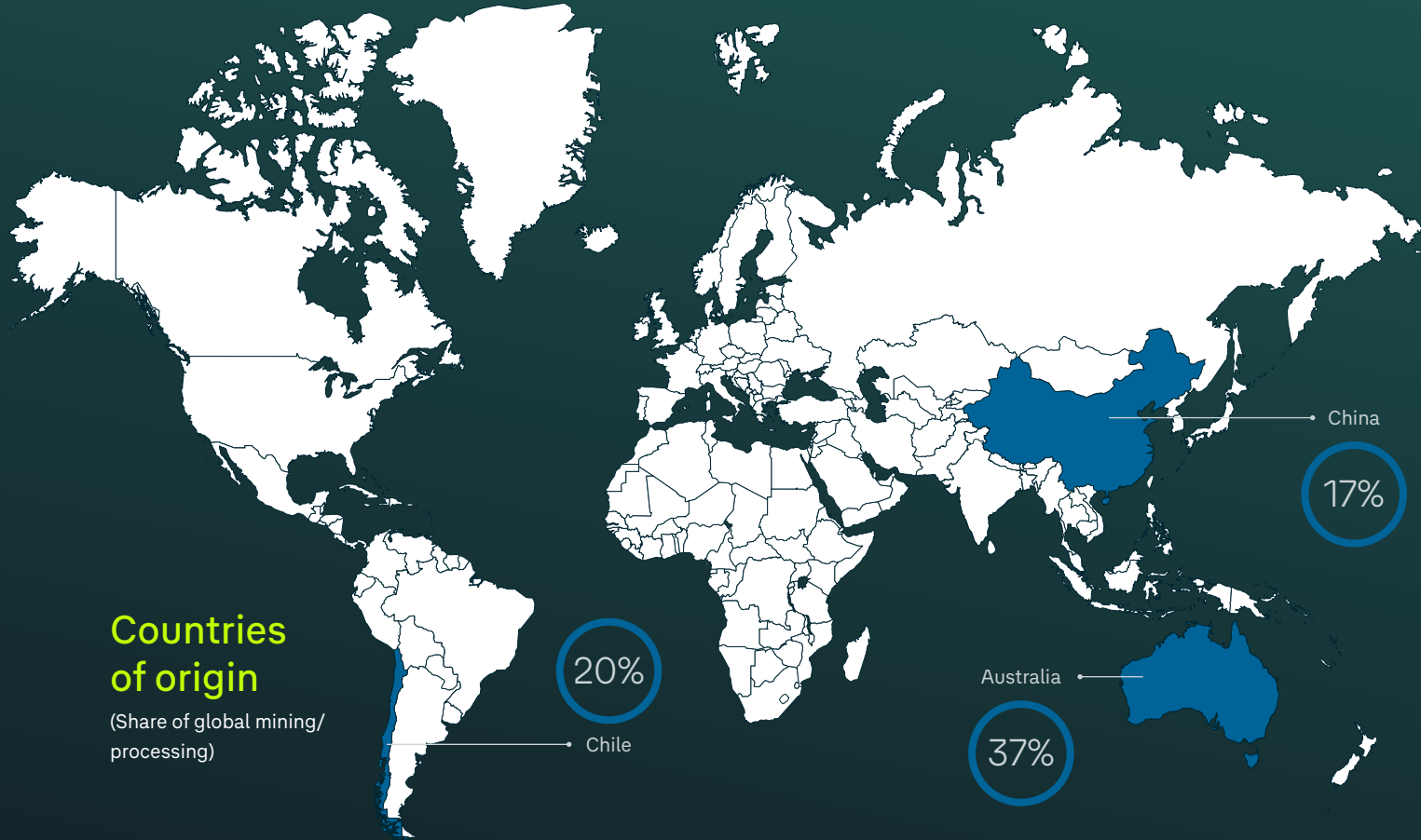
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# → Lithium

Lithium is a soft and light, silvery-white alkali metal found in mineral and brine deposits. The metal is best known for its high energy storage density and its use in rechargeable batteries. Further industrial applications are metallurgy, glass and ceramics, lubricants, and drugs.



## Countries of origin

(Share of global mining/processing)

● Top 3 mining countries Source: USGS, 2024 estimates.

## Key material-specific risks

### Environment



— Water pollution and consumption

### Human Rights



— Forced or compulsory labor

### Community Life



— Protection of the rights of indigenous and local people  
— Causing harmful environmental change



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## Lithium in our Supply Chain

Lithium hydroxide and lithium carbonate are the most important lithium products, which also goes for the Volkswagen Group. They serve as a key raw material for battery cathodes. Demand for lithium is therefore expected to rise in the coming years due to the expansion of electromobility. In 2024, the Volkswagen Group did not directly source any raw materials for batteries, including lithium. Starting 2025, the Volkswagen Group's battery manufacturer PowerCo will be directly supplied with lithium (see more on → [page 26](#)). Other than that, the Volkswagen Group purchases battery cells and modules containing lithium from major battery manufacturers.

## Risk Assessment

In order to assess the systemic and salient risks associated with lithium, we continuously work with cross-industry initiatives and other external stakeholders to understand the ESG risks associated with the lithium supply chain.

Additionally, we collect supply chain data through our battery suppliers and review the data, considering the results of our general raw material risk assessment. Australia, Chile, Brazil, Canada, China, Argentina, US are among the main countries of origin. The systemic and salient risks linked to lithium production are primarily water-related and include various adverse environmental impacts on soil and biodiversity. Environmental risks are particularly high for water stress areas such as Chile. Additional risks are related to operations affecting indigenous peoples' rights. We also identified forced labor as a potential risk in particular geographies, following a grievance case in 2023 (for more information see [RRMR 2023 \(page 25\)](#)).

### KEY APPLICATION

— EV batteries

## "Mesa Multiactor" — a Roundtable for Dialogue in Chile

The Volkswagen Group is one of the founding members of the **Responsible Lithium Partnership** in Chile. The initiative is coordinated by the German Agency for International Cooperation (GIZ) and promotes the responsible use of resources in lithium production in the arid Salar de Atacama region. The ecosystem in the region is fragile, and mining risks could affect ecosystems and local livelihoods, intensifying conflicts over the scarce water resources between the local communities and the lithium-mining companies.

The unique format of the  ["Mesa Multiactor"](#) project, a multi-stakeholder roundtable, brings together representatives from local tourism and agriculture associations, lithium-mining companies, indigenous communities, and local authorities to reach collaborative agreements on priority issues related to the sustainability of the region. The project has proven very successful over the past years, facilitating dialogue and reducing conflict potential regarding water and community rights.

During an on-site visit in March 2024 together with a delegation of funding partners, we were able to see the solutions and activities already implemented in the region. The visit also allowed us to directly communicate with representatives of local and indigenous communities and other stakeholders such as representatives from tourism associations. With a joint action plan signed by around 20 local stakeholders, a range of initiatives and measures

were agreed on. Several are already completed or underway, with others prioritized for the future.

- A cadaster of water rights holders for the river basin
- Geological and hydrological mapping
- Awareness campaigns on the challenges of water scarcity
- Inauguration of a gray water recycling system at a local high school (capacity of 5,000 liters per week)
- Providing access to data from more than 300 resources, with additional resources made available through a website and social media

The participants have extended the project until February 2025 and aim to institutionalize the roundtable to ensure their work continues beyond that time.



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Direct Lithium Extraction (DLE) has emerged as a set of different technologies to selectively extract lithium ions directly from lithium-rich solutions, allowing for reduced brine consumption but increasing energy and freshwater consumption, depending on the specific technology used. However, to date, the available data on environmental impacts of DLE is limited to a few pilot projects, and the associated ESG risks have yet to be fully assessed. The Volkswagen Group's Sustainability Supply Chain team will closely monitor the pilot projects and collaborate with relevant stakeholders to evaluate their specific social and environmental impacts.

### Risk Mitigation

Our strategy for risk mitigation in the lithium supply chain is multi-faceted, with a focus on working closely with our key battery suppliers to engage along the supply chain. Our approach contains sustainability requirements for all suppliers and is closely coordinated for all battery raw materials. For more information see → [page 25](#).

We also engage in multi-stakeholder initiatives and believe that joint approaches can help to achieve positive impacts in mining-affected regions by working locally with affected stakeholders and indigenous communities. During the reporting period, we continued to engage with **IRMA** to promote common standards and increase the share of IRMA-certified material. During a trip to Chile, we met with two lithium-producing companies who shared insights into their IRMA assessments conducted in 2023. In 2024, a major multi-metal facility of Talison Lithium located in Australia committed to undergoing the IRMA assessment. This audit will further increase transparency surrounding ESG aspects of lithium production at Australian hard rock sites.

The **Lithium Working Group of the German Automotive Sector Dialogue**, in which Porsche participates, continued to work with the set of [recommendations for sustainable lithium production](#) developed in 2023. The common set of expectations

is mainly directed at mining companies, while intermediate actors such as processing facilities and cathode material manufacturers have not yet been addressed. Through dialogue with companies in the supply chain about their experience in applying and cascading the recommendations, we were able to deepen our insight into selected aspects of supply chain risks and further promote the recommendations.

The Volkswagen Group also participates in the **RMI Working Group on Lithium** to promote due diligence activities and responsible sourcing throughout the supply chain. During the reporting period, the main focus of the working group was on sharing best practices for risk mitigation along the lithium supply chain. In this context, we shared insights from our visit to Chile, highlighting the effectiveness of joint engagement to improve the situation of affected local stakeholders. In addition, as a result of joint supply chain mapping and industry engagement efforts, two more smelting facilities were successfully assessed according to the Responsible Minerals Assurance Process (RMAP) standard.

As part of our broader stakeholder engagement, we collaborate with NGOs, academics and government bodies on specific topics. In 2024, we continued to work with NGOs in order to deepen our understanding of the situation of local stakeholders and communities in resource-rich regions. For example, we met with NGO representatives from Zimbabwe to discuss the social and environmental risks associated with artisanal and small-scale lithium mining that arose in connection with high lithium prices but ceased recently due to the decline in lithium prices.

In the reporting period, the Volkswagen Group discussed a research proposal with academic partners in Australia and Chile. The proposal was to focus on social risks originating in the lithium triangle in South America (Argentina, Bolivia, Chile). The fruitful discussions helped us to better understand the research interests of international academics and to define our own focus areas for continued engagement in 2025.

### Stakeholder Engagement

- Regular meetings with battery suppliers
- Direct conversations with local stakeholders, NGOs and companies during an on-site visit to the project Mesa Multiactor in Chile
- Participation in lithium working groups of the German Automotive Sector Dialogue and the RMI

### Outlook 2025

We plan to

- continue supporting local stakeholders in Chile through the Responsible Lithium Partnership
- intensify the dialogue with external stakeholders on environmental and social risks related to new extraction technologies such as DLE and new geographies where lithium is extracted (apart from Chile and Australia)
- further adapt our processes and prepare for the EUBR

For more information on the EU Battery Regulation see → [page 24](#) of this report.



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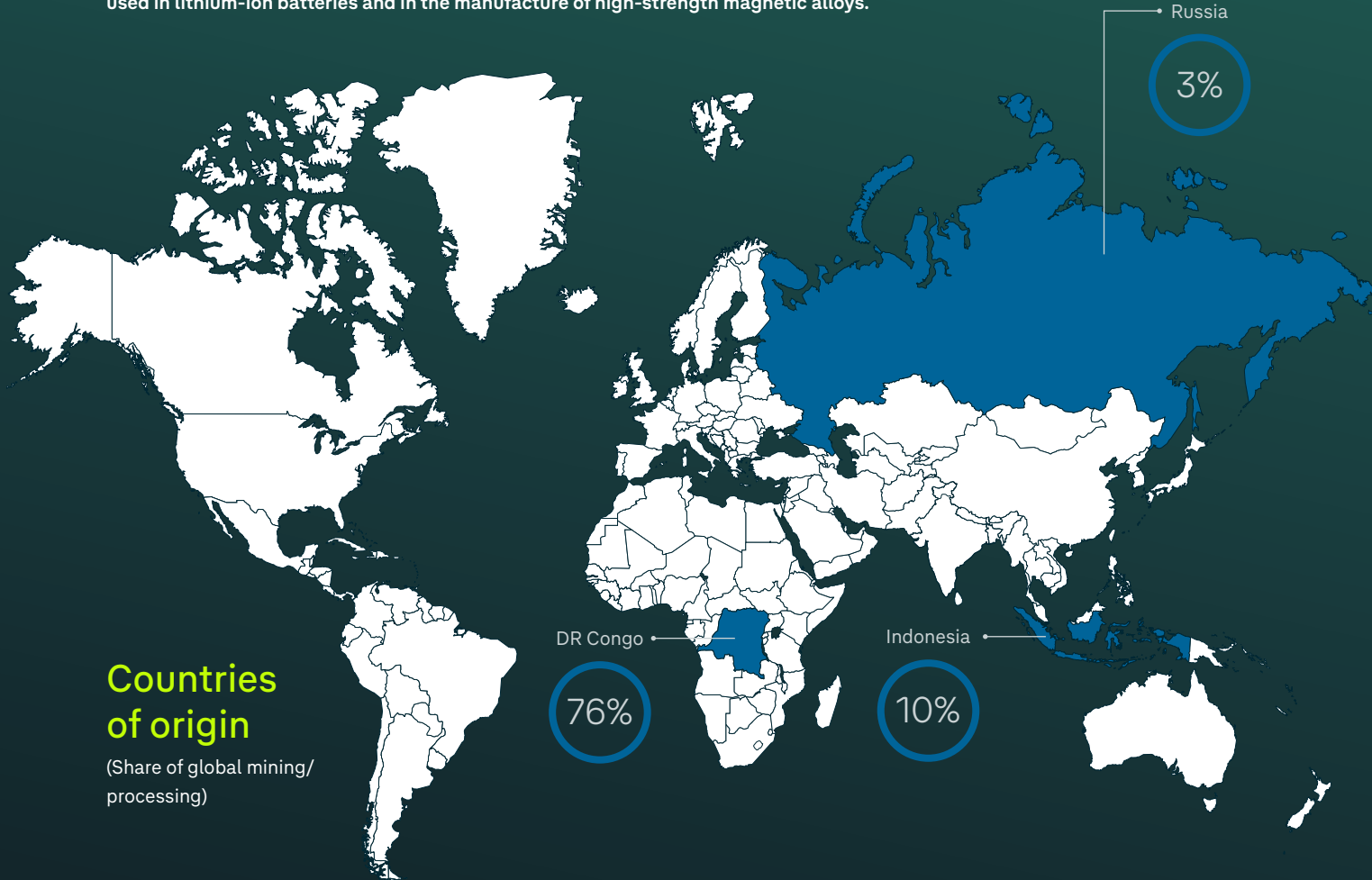
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# → Cobalt

Cobalt is a hard, lustrous, silvery metal found in rocks only in a chemically combined form. The vast majority of cobalt is extracted as a by-product of existing nickel and copper mining. Cobalt is primarily used in lithium-ion batteries and in the manufacture of high-strength magnetic alloys.



## Countries of origin

(Share of global mining/processing)

● Top 3 mining countries Source: USGS, Cobalt Institute, 2024 estimates.

## Key material-specific risks

### Environment



— Hazardous substances



— Water pollution including marine environment



— Handling and disposal of waste



— Soil pollution and land degradation  
— Loss of biodiversity

### Human Rights



— Child labor  
— Forced or compulsory labor  
— Discrimination



— Health and safety  
— Trade union freedoms  
— Payment of adequate wages

### Community Life



— Protection of the rights of local communities  
— Causing harmful environmental change





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## Cobalt in our Supply Chain

Cobalt hydroxide, cobalt sulfate and cobalt metal are the main inputs for electric vehicle (EV) battery cell production. Cobalt plays an essential role in batteries, improving vehicle range and safety by providing thermal stability in cathode chemistry. In 2024, the Volkswagen Group did not directly source any raw materials for batteries, including cobalt. Starting 2025, the Volkswagen Group's battery manufacturer PowerCo will be directly supplied with cobalt (see more on → [page 26](#)).

## Risk Assessment

The Volkswagen Group's main sourcing countries for cobalt are DR Congo, Turkey, Indonesia and Australia. Human rights and adverse environmental impacts are the most systemic and salient risks identified for cobalt. This is mainly due to the great majority of cobalt being mined in the southern area of the DR Congo, often in artisanal and small-scale mining (ASM) with low wages, poor working conditions and little to no safety. The lack of law enforcement is also related to adverse environmental impacts on the neighboring communities. Supply chain traceability is low and challenging due to the many actors involved.

## Risk Mitigation

In order to mitigate the risks associated with the complex cobalt supply chain, we are focusing on working closely with our battery suppliers and engaging with cross-industry initiatives and NGOs. Our approach includes sustainability

requirements for all suppliers and is closely coordinated for all battery raw materials. See → [page 25](#) for more information.

The Volkswagen Group strictly excludes artisanal mining operations from its sourcing of cobalt. However, in line with the OECD Minerals Guidance, we do not generally prohibit sourcing from conflict-affected and high-risk areas but instead aim to promote responsible sources within these regions. We are sensitive to evidence that may help identify suppliers from conflict-affected and high-risk areas that are prone to human rights abuses.

We seek contractual commitment to international standards such as those developed by IRMA or RMI (RMAP). Tailing management in particular is a main risk at cobalt mining sites and must be properly addressed to comply with international best practices. However, compared to lithium, the cobalt supply chain entails additional challenges regarding standards. Cobalt is often mined as a by-product of large-scale copper (mainly in DR Congo) or nickel mines (e.g., Indonesia). The respective copper-cobalt mining companies are often new to the IRMA standard and sometimes favor alternative standards.

The Volkswagen Group also participates in the RMI working groups on cobalt and emerging minerals. We also continued to engage in discussions with NGOs, media and other stakeholders to improve our understanding of local affected communities and emerging risks.

In 2024, we continued phase 2 of Cobalt for Development (C4D), a cross-industry pilot project implemented by GIZ. The project works to support communities dependent on ASM cobalt mining in the DR Congo's Lualaba Province. In C4D, we work together with partners to improve working and living conditions of small-scale cobalt miners and their communities.

### KEY APPLICATION

— EV batteries

## Stakeholder Engagement

- Regular meetings with battery suppliers
- Ongoing exchange with NGOs, media and other stakeholders regarding local affected communities
- Participation in RMI working groups on cobalt and emerging minerals

## Outlook 2025

We plan to

- continue to promote the IRMA standard for responsible cobalt mining
- further adapt our processes and prepare for the EUBR

For more information on the EU Battery Regulation see → [page 24](#) of this report.



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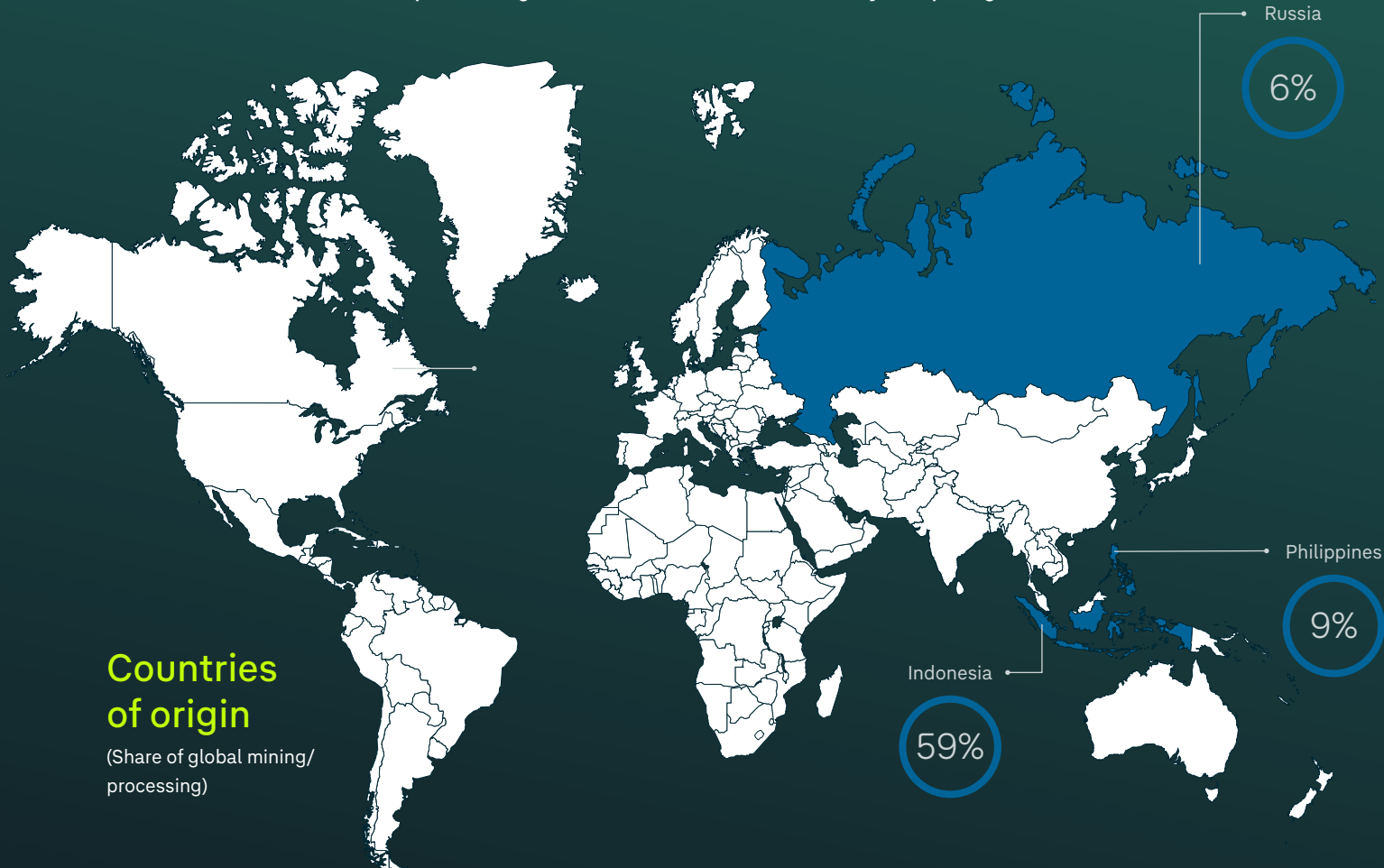
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# → Nickel

Nickel is a metallic element with a silvery appearance which occurs naturally in soil and water. Primary nickel is produced and used as ferronickel, nickel oxides and other chemicals. Lithium-Ion Batteries and stainless steel are the most important usages of nickel. It is also used in other alloys and plating.



## Countries of origin

(Share of global mining/processing)

● Top 3 mining countries Source: USGS, 2024 estimates.

## Key material-specific risks

### Environment



- Hazardous substances
- Air pollution



- Water including marine environment



- Handling and disposal of waste



- Soil pollution and land degradation
- Loss of biodiversity

### Human Rights



- Child labor
- Support of armed groups



- Health and safety
- Trade union freedoms
- Payment of appropriate wages
- Plant safety

### Community Life



- Forced evictions or expropriations
- Protection of the rights of indigenous people
- Causing harmful environmental change



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## Nickel in our Supply Chain

Nickel is a strategically important raw material in the electrification of vehicles, in addition to its other uses in stainless steel, alloys and plating. Nickel sulfate provides a source of nickel ions for the cathode material of lithium-ion batteries, such as Nickel-Manganese-Cobalt (NMC) batteries, contributing to overall performance, energy density and stability of the batteries. In EV batteries, nickel-rich cathodes improve energy density and stability while reducing costs.

For the Volkswagen Group, EV batteries are prioritized as focus parts and we did not directly source any nickel for this use in 2024. Starting 2025, the Volkswagen Group's battery manufacturer PowerCo will be directly supplied with battery nickel (see more on → [page 26](#)).

## Risk Assessment

Our main countries of origin for nickel are Australia, China, Democratic Republic of the Congo, Finland, Indonesia, Papua New Guinea, Turkey. The systemic and salient risk areas associated with nickel are the environmental impacts of open-pit mining such as the destruction of forests and soils, water pollution, and waste handling, particularly toxic tailings from processing facilities. Additionally, nickel production is a greenhouse-gas- and energy-intensive process. Adverse environmental effects also have a direct impact on local communities. Another salient risk area is human rights, including working conditions, health and safety.

### KEY APPLICATION

- EV batteries
- Exhaust systems

In order to assess the systemic and salient risks associated with nickel, we are continuously collecting supply chain data through our battery suppliers and working with cross-industry initiatives and non-governmental organizations. A particular challenge in the sourcing of nickel from Indonesia is the complex combination of large nickel mines and smelting and refining facilities in industrial parks. Assigning risks and responsibilities for worker protection and environmental management is difficult, due to cumulative impacts and intertwined operations.

## Risk Mitigation

To mitigate the risks associated with the complex nickel supply chain, we are focusing on working closely with our battery suppliers and engaging with cross-industry initiatives and NGOs. Our approach includes sustainability requirements for all suppliers and is closely coordinated for all raw materials used in batteries. See → [page 25](#) for more information.

As with other metals, we seek to contractually commit our nickel suppliers to international standards such as the IRMA standard. However, compared to lithium, the nickel supply chain entails additional challenges as nickel mining companies are often new to the IRMA standard and sometimes favor alternative standards. The Volkswagen Group also participates in the **RMI Working Group on Nickel**. During the reporting period, the working group met to discuss human rights risks and environmental concerns and partnered with the International Labour Organization (ILO) to address systemic labor risks within the nickel supply chain.

## Stakeholder Engagement

- Founding member of Nickel on-the-ground partnership project in Indonesia
- Engagement in industry initiatives and working groups
- Ongoing dialogue with industry peers and direct and indirect suppliers
- Collaboration with NGOs and stakeholders

## Outlook 2025

We plan to

- continue promoting IRMA within the nickel supply chain
- implement an on-the-ground partnership project in Indonesia
- further adapt our processes and prepare for the EUBR

For more information on the EU Battery Regulation see → [page 24](#) of this report.



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In 2024, we conducted a field trip to Indonesia to assess environmental, social and governance (ESG) risks related to nickel mining. The trip facilitated engagement with local stakeholders, including government bodies, workers' unions and community representatives, to identify challenges and implement risk mitigation strategies.

During another trip to Canada, we engaged with the Mining Association of Canada and local authorities to understand the structural challenges of IRMA assessment and review current risks associated with water management and reclamation.

In the reporting year, the Volkswagen Group took a leadership role as a founding member of **an on-the-ground partnership project in Indonesia**. This initiative focuses on driving on-the-ground improvements addressing key ESG risks such as biodiversity loss, labor conditions, human rights impacts, water contamination and tailing management. The partnership promotes collaboration with local stakeholders, including mining companies, NGOs and community representatives, to implement tangible solutions and improve industry practices. Potential on-the-ground projects in the Indonesian regions of Sulawesi and Halmahera were evaluated. Following these scoping activities, implementation of the projects is planned to start in 2025.

We also aligned with the chinese and indonesian companies on in-country work in Indonesia to promote sustainable sourcing and enhance traceability.

During the reporting year, the Volkswagen Group also continued to engage in discussions with NGOs, media and other stakeholders to target key issues such as biodiversity degradation and human rights risks and explored satellite monitoring programs of the European Space Programme partnership to monitor deforestation activities.





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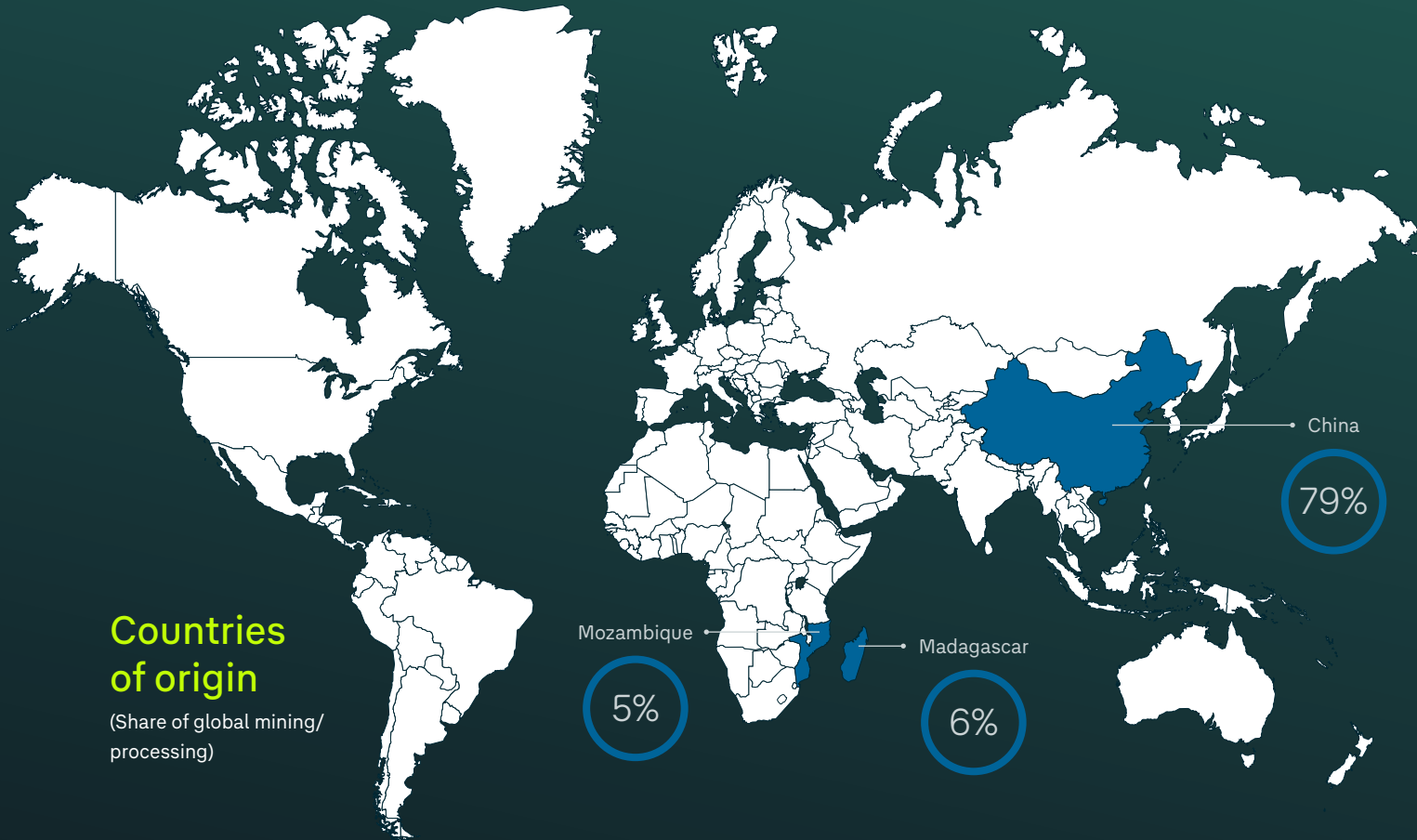
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# → Natural Graphite

Graphite is a soft, crystalline form of carbon with a metallic luster and a dark gray color. With its thermal and electrical conductivity, it is suitable for many industrial applications. Graphite has two forms: natural graphite, which is mined, and synthetic graphite, which is produced from petroleum coke or coal tar. Both are used on a large scale in pencils, lubricants and electrodes.



● Top 3 mining countries Source: USGS, 2024 estimates.

## Key material-specific risks

### Environment



- Production and use of pollutants
- Air pollution

### Human Rights



- Health and safety

### Community Life



- Harmful environmental change



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## Natural Graphite in our Supply Chain

Graphite (in both natural and synthetic form) is contained in a vast number of vehicle parts, most importantly in the anodes of EV batteries, but also in brake discs and precision parts, graphite powders, etc. For the Volkswagen Group, EV batteries are by far the largest field where natural graphite is required, and we did not directly source any natural graphite for this use in 2024. Starting 2025, the Volkswagen Group's battery manufacturer PowerCo will be directly supplied with natural graphite (see more on → [page 24](#)).

### Risk Assessment

The Volkswagen Group has determined natural graphite as one of its priority materials, so our risk assessment is primarily focused on further analyzing the natural graphite supply chain and the associated human rights, community and environmental risks. Natural graphite is mainly mined in open-pit and underground mines. The graphite ore is then processed, using methods that depend on the type of deposit, the flake size distribution and the required specifications of the final concentrate.

Human rights and adverse environmental impacts were identified as the most systemic and salient risk areas, particularly occupational health and safety, air pollution, and the production and use of pollutants and hazardous chemicals. China is by far the world's leading supplier of natural graphite, followed by Madagascar and Mozambique. Achieving transparency remains a challenge, given the fragmented nature of the mining sector and the strong reliance on China. In addi-

tion, law enforcement in the mining regions tends to be weak, increasing human rights and environmental risks.

In 2024, the Volkswagen Group conducted an in-depth risk analysis of the Chinese natural graphite sector, which included desktop research and a series of interviews with stakeholders in the supply chain. We also initiated a project with external experts to complement our existing insights in terms of actual salient risks in natural graphite in China that we need to address. We expect the results of the project to validate our risk analysis, to enable direct contact with tier-2 and tier-3 suppliers as a follow-up, and to derive opportunities for risk mitigation and supplier engagement in 2025. The project was carried out for the raw materials graphite, magnesium and REE.

### Risk Mitigation

To mitigate the risks associated with the complex natural graphite supply chain, we are focusing on working closely with our battery suppliers and engaging with cross-industry initiatives and NGOs. Our approach includes sustainability requirements for all suppliers and is closely coordinated for all battery raw materials. See → [page 25](#) for more information.

As for other metals, we actively engage with IRMA and seek to contractually commit our graphite suppliers to the IRMA standard. To date, there is a lack of sustainability standards for graphite on both the mining and the refining level, and the development of a common approach is additionally complicated by differing production processes for synthetic and natural graphite. Besides IRMA, the Volkswagen Group is also a member of the RMI Working Groups on Graphite and Emerging Minerals.

## Stakeholder Engagement

- Stakeholder interviews to increase understanding of the complex and fragmented natural graphite supply chains
- Member of the RMI Working Group on Graphite and Emerging Minerals
- Regular meetings with battery suppliers

### Outlook 2025

We plan to

- continue expanding our graphite supply chain mapping and audit program with our battery suppliers
- initiate dialogue with Chinese stakeholders to increase supply chain transparency
- raise awareness among sub-suppliers and promote joint standards through dialogue
- further adapt our processes and prepare for the EUBR

For more information on the EU Battery Regulation → [see page 24](#) of this report.

#### KEY APPLICATION

— EV batteries



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# Conflict Minerals

Tin, tantalum, tungsten and gold (3TG) are called “conflict minerals” due to their role in violent conflicts in the Democratic Republic of the Congo (DRC) and other Conflict Affected and High Risk Areas (CAHRAs), where their extraction and trade are used to fund armed groups while fueling human rights abuses and corruption.



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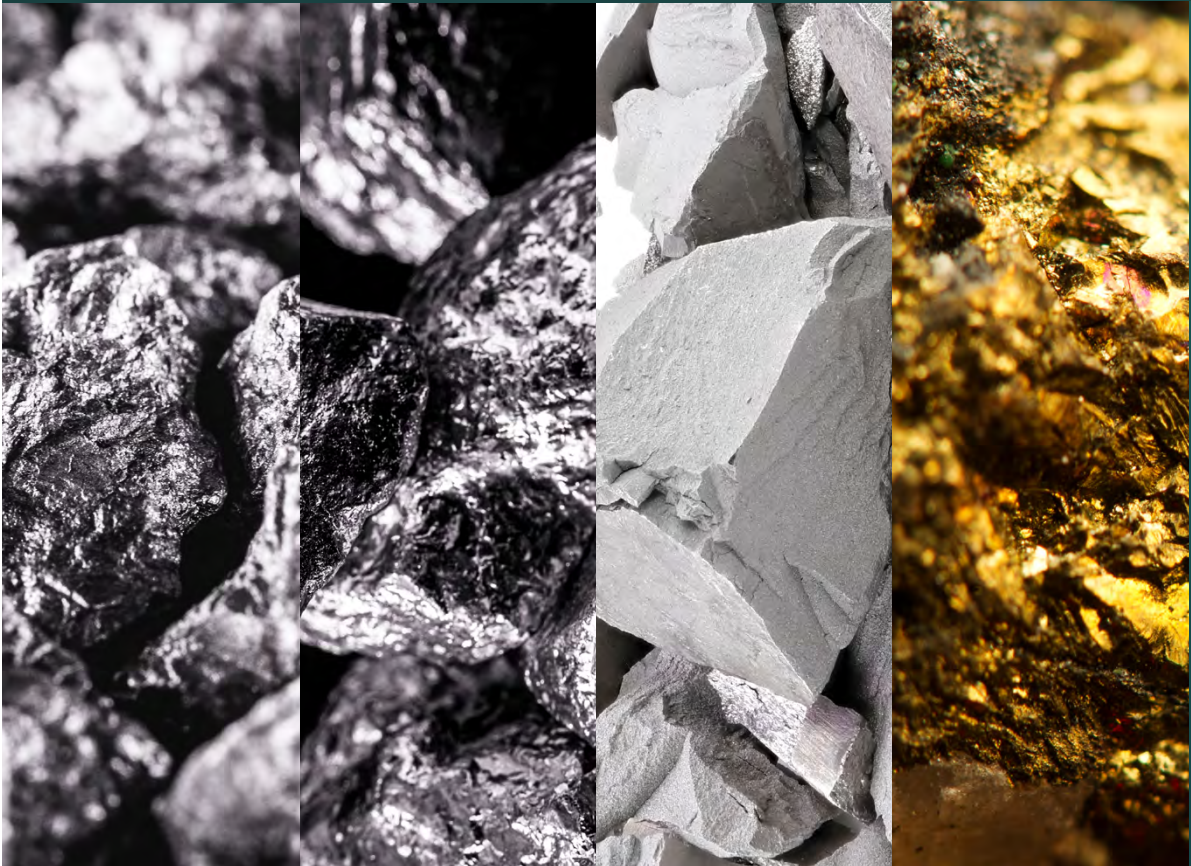
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# → 3TG

TIN, TANTALUM, TUNGSTEN AND GOLD

“Conflict minerals” include the metals tantalum, tin, tungsten and gold — also referred to as 3TG, which are the extracts of the minerals cassiterite, columbite-tantalite and wolframite, respectively. 3TG metals are used in small quantities in a wide range of electronic products and are considered critical for the electronic and other industries.



Because 3TG metals are four different raw materials with a large total number of countries of origin, we decided against visualizing them on a world map. Instead, the 3TG smelters and the countries and territories of origin we identified are listed in Annexes III and IV of this report.

## Key material-specific risks

### Environment



- Hazardous substances
- Air pollution
- Noise and vibrations



- Water pollution and consumption



- Handling and disposal of waste



- Soil pollution and land degradation
- Loss of biodiversity

### Human Rights



- Child labor
- Forced or compulsory labor
- Support of armed groups
- Any form of discrimination



- Health and safety
- Payment of appropriate wages
- Plant safety

### Community Life



- Forced evictions or expropriations
- Protection of the rights of indigenous people
- Causing harmful environmental change





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## 3TG in our Supply Chain

3TG metals (tin, tantalum, tungsten and gold) are used in minute quantities in a wide variety of automotive parts and components. This lack of focal parts to concentrate on creates a key challenge for 3TG due diligence within automotive supply chains. Tracing the upstream supply chains becomes even more challenging considering that we do not source 3TG metals directly. They typically enter our supply chains several levels upstream, where we do not have direct contractual relationships.

## Risk Assessment

3TG metals are mined in both large-scale and artisanal and small-scale mining (ASM), and as with most other minerals, the highest risks occur at the mining level. Mining provides a livelihood for many people in the mining regions but frequently takes place under precarious working conditions in disregard of labor law, human rights, or health and safety precautions, especially in ASM.

Almost all risk categories defined in the Volkswagen Group's RMDDMS apply to the group of 3TG conflict minerals. In our

### KEY APPLICATIONS

- Various automotive parts
- Electronics

annual risk assessment, we identified human rights risks including child labor and support for non-state armed groups and/or public or private security forces as the main systemic social risks. Salient environmental risks are pollutants and hazardous chemicals in mining discharge.

The basis for our 3TG due diligence activities is the "choke point approach", in line with the OECD Minerals Guidance. The Guidance recommends that, as a best practice, due diligence should focus on the smelters and refiners as the critical points in the complex and multi-step processing of 3TG metals. First, smelters and refiners are identified, and then we aim to ensure that they source responsibly.

To collect information along the supply chain, we use Assent's supply chain management solution, including a third-party database, and we ask our suppliers to complete the Conflict Minerals Reporting Template (CMRT) of the Responsible Minerals Initiative (RMI). In addition to identifying smelters and refiners, the CMRT also requires the countries of origin of the mined material to be listed. This approach enables us to efficiently obtain more accurate and relevant information from our suppliers despite the large number of suppliers involved. In 2024, we identified and engaged with approximately 1,500 suppliers who supply nearly 200,000 different parts.

We have determined country of origin data for the majority of the smelters in our supply chain. Please see the lists of smelters and the 3TG countries of origin in → [Annexes III and IV](#) of this report.

## Stakeholder Engagement

- Member of the RMI's Smelter Engagement and Gold teams
- Dialogue with tier-1 suppliers, promoting the need for RMAP-conformant smelters in the upstream supply chain
- Encourage the use of RMAP for smelters and refiners
- Ongoing dialogues with NGOs

## Outlook 2025

We plan to

- further increase the response rate when collecting CMRTs from suppliers to increase transparency
- engage with key direct suppliers to emphasize the importance of sustainable 3TG supply chains
- further increase the percentage of RMAP-conformant 3TG smelters in our supply chain



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## Risk Mitigation

As a downstream buyer of complex, already processed automotive components, we adopt a multi-pronged approach to risk mitigation. In the reporting period, we continued to make progress in collecting supply chain information and identifying critical smelters. However, transparency in the fragmented 3TG supply chains for a high number of affected automotive parts remains a challenge.

Cross-industry collaboration is another part of our approach to addressing human rights and environmental risks in our complex 3TG supply chains. The Volkswagen Group is a member of the  **RMI** and continued to participate in the Smelter Engagement Team and the Gold Team in 2024. Together with other RMI members, we have worked with a number of smelters and refiners, encouraging them to undergo the RMI's **Responsible Minerals Assurance Process (RMAP)** and to pursue risk mitigation and continuous improvement.

Since we do not directly purchase any 3TG metals, we have established sustainable 3TG sourcing requirements for our direct suppliers of parts and components. Our contractually binding **Code of Conduct for Business Partners (CoC BP)** requests them to comply with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and to ensure that they only use responsibly sourced 3TG metals. To comply, the 3TG smelters and refiners in their supply chains must conform with the RMI's RMAP standard (or similar assessments).

We expect our suppliers to avoid all minerals from conflict-affected smelters. However, in line with the OECD Minerals Guidance, our goal is not to ban the procurement of 3TG metals that originate in conflict-affected and high-risk areas, but to promote sourcing from responsible sources within these regions. In line with the OECD Minerals Guidance, we continue to look for red flags that can help identify suppliers from conflict-affected and high-risk areas that are prone to human rights violations.

Of the smelters identified in our supply chain, nearly 61% were RMAP-conformant at the end of 2024. The slight decrease in RMAP conformance compared to the previous reporting year is due to a reduced number of globally available conformant smelters.



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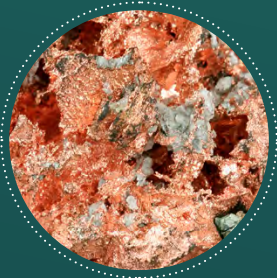
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# Other Raw Materials

Besides battery raw materials and conflict minerals, we use a range of other critical raw materials for our products — both mining-based and renewable (plant or animal-based).



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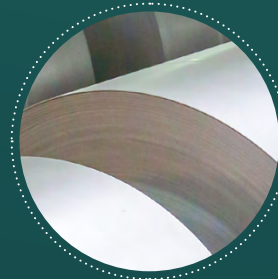
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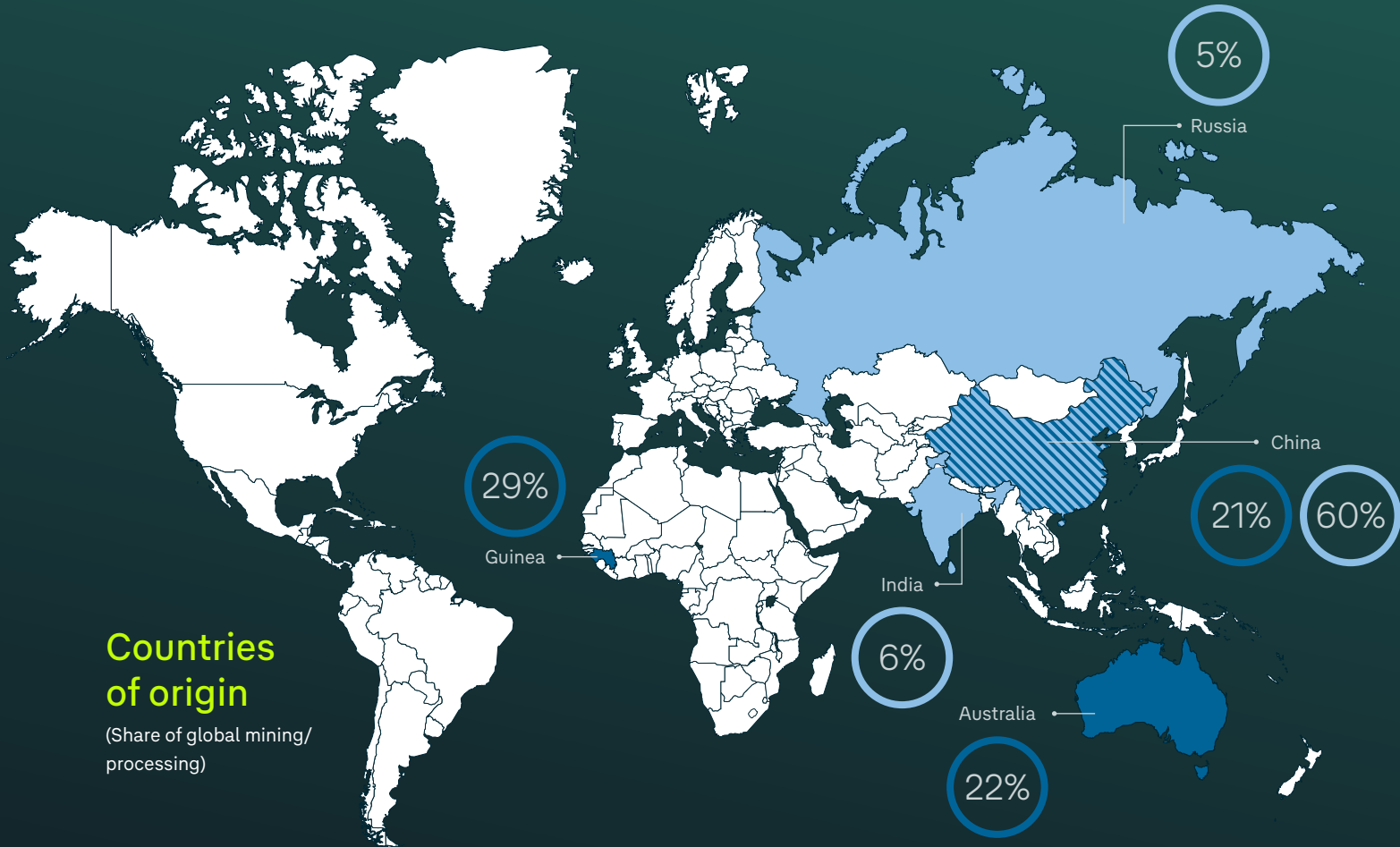
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# → Aluminum

Aluminum is extremely versatile and is therefore used in a variety of applications, often replacing steel due to its light weight. It is strong and nonmagnetic and conducts heat and electricity. Aluminum is an abundant element in the earth's crust but does not occur in its pure form. It has to be extracted from bauxite in a resource-intensive process.



## Countries of origin

(Share of global mining/processing)

● Top 3 mining countries ● Top 3 smelting countries ■ Both Source: USGS, EU RMIS, 2024 estimates.

## Key material-specific risks

### Environment

- Air pollution
- Water pollution and consumption
- Handling and disposal of waste
- Soil pollution and land degradation
- Loss of biodiversity

### Human Rights

- Forced or compulsory labor

### Community Life

- Forced evictions or expropriations
- Protection of the rights of indigenous people
- Causing harmful environmental change





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## Aluminum in our Supply Chain

Aluminum is the second-most commonly used material in vehicles (after steel), typically accounting for around 5% to 25% of the vehicle's body weight, depending on the model. It is used in components such as engine blocks, chassis, frames, body sheets and wheels and is also found in electric vehicle (EV)-specific components such as battery housings, cell blocks and cooling plates.

Aluminum is a preferred material because of its excellent strength-to-weight ratio and high crash resistance. Replacing steel with aluminum reduces the overall weight of the vehicles, increasing performance/battery range. With the continuing trend towards lightweighting and the electrification of vehicles, the demand for aluminum is expected to continue to grow.

The primary mining countries for bauxite are Guinea, Australia, China and Brazil. The Volkswagen Group sources aluminum mainly indirectly. The initial steps of the aluminum supply chain are often performed by vertically integrated global

### KEY APPLICATIONS

- Body sheets
- Wheel rims
- Battery cases
- Die casting and extrusion parts

companies. However, some aluminum components then undergo several additional processing steps before reaching our direct suppliers. These intermediate tiers and the diverse applications of aluminum in our vehicles present significant challenges in terms of transparency and risk mitigation at deeper levels of the supply chain.

## Risk Assessment


The Volkswagen Group identified three systemic and salient risk areas primarily connected to the deeper levels of the supply chain: adverse environmental impacts, adverse impacts on local and indigenous communities, and the risk of forced and compulsory labor in smelting in a particular region. Bauxite mining involves environmental degradation of soil and water due to open-pit mining and sediment flows. The refining of bauxite generates a large amount of residue known as red mud, which can pose environmental risks such as air and water pollution. Smelting is highly energy intensive and linked to high CO<sub>2</sub> emissions. The negative environmental impacts are closely linked to risks to affected and indigenous communities such as forced evictions and reduced access to clean water.

In 2024, we continued to focus on better understanding the spatial dimension and impact of the risks that arise. We engaged in a workshop with the German Raw Materials Agency (DERA) for valuable insights into the material flows of bauxite and magnesium (used in aluminum alloys) and risks related to specific regions. We also continued our dialogue with direct suppliers and other external stakeholders, including several NGOs. In November, we attended a workshop on bauxite mining and the associated risks in Guinea.

## Stakeholder Engagement

- Continued exchange with NGOs on human rights and environmental risks, particularly in high-risk regions and mining countries
- Continued work with the ASI to drive the role of standards in the aluminum supply chain
- Ongoing dialogue with tier-1 and tier-2 suppliers to encourage them to become members of the ASI and to become certified according to the ASI CoC Standard
- Workshop with DERA on the material flows of bauxite and magnesium

## Risk Mitigation

To mitigate environmental, community and human rights risks within a complex supply chain, we strive to expand the use of aluminum certified to recognized standards such as that established by the  [Aluminium Stewardship Initiative \(ASI\)](#), in particular Chain of Custody-certified material. Although more entities are joining the ASI and becoming certified according to its standards, many of our suppliers are still not ASI certified.



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On behalf of the Volkswagen Group, Audi continues to be actively engaged in the ASI and supports the initiative in further developing the standards to address current challenges. In 2024, Audi was successfully recertified against the ASI CoC Standard and is seeking recertification against the ASI Performance Standard in 2025. The Volkswagen Group continues to encourage its brands to become ASI certified and to increase market demand for ASI-certified material.

The Volkswagen Group is also a member of the Initiative for Responsible Mining Assurance (IRMA), which offers an independent assessment of mines according to comprehensive standards.

The **specification sheet for aluminum body sheet parts**, which was rolled out across all Volkswagen brands in 2023, requests suppliers to fulfill sustainability requirements such as certification to ASI standards and supplying ASI CoC-certified material. For 2025, Audi is planning a pilot project to extend the specification sheet with ASI requirements to additional material groups, e.g., alloy wheels and battery housings.

In the reporting year, Audi conducted several environmental training sessions for procurement staff and representatives of tier-1 suppliers, with more than 500 participants. In addition, in-depth workshops were held with selected suppliers to discuss our circular economy requirements and the availability of recycled material for selected material groups, including aluminum.

## Decarbonization & Recycled Material

Aluminum is one of the Volkswagen Group's focus materials for the decarbonization of its supply chain. The goal is to increase the share of recycled materials as well as the share of low-carbon aluminum in our supply chain. An Aluminum Closed Loop project was started at Audi in 2017 and was subsequently rolled out across other press shops of the Volkswagen Group. To date, a total of more than 1 Mio. metric tons of CO<sub>2</sub> has been saved. Porsche has partnered with the Norwegian aluminum supplier Hydro for the use of low-carbon primary aluminum as well as secondary aluminum with a high proportion of recycled material in its vehicles.

Although both projects extend beyond the scope of the RMDDMS, the initiatives have a positive impact on the aluminum supply chain as the use of recycled aluminum can assist in decreasing the environmental and social pressures of primary aluminum production. More information is available in our [2024 Annual Report \(page 335\)](#).

## Outlook 2025

We plan to

- strengthen the ASI approach internally and work towards the ASI certification of more Volkswagen Group brands
- pilot project at Audi to roll out the aluminum specification sheet for additional aluminum material groups
- obtain recertification against ASI Performance Standard



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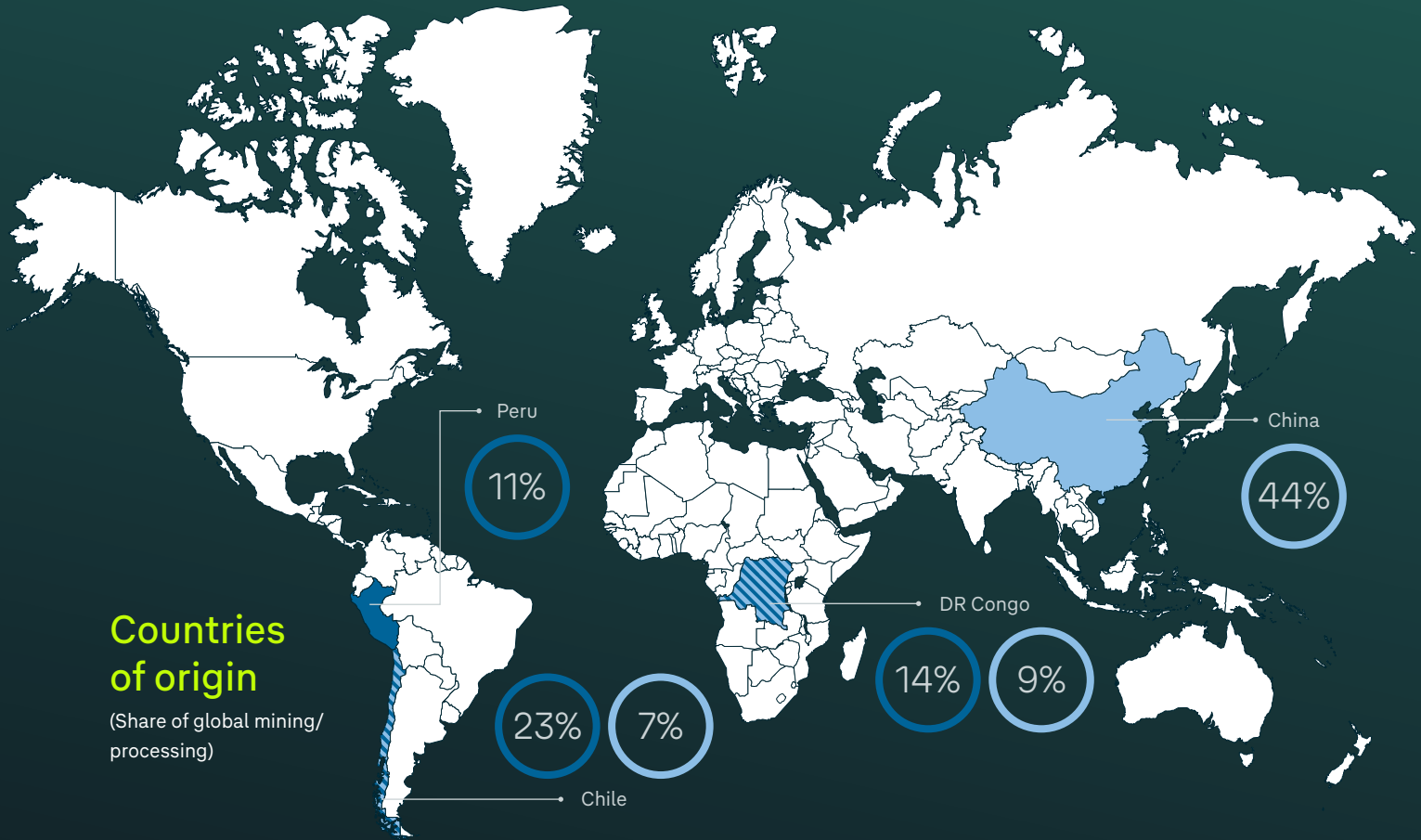
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# → Copper

Copper, with its high thermal and electrical conductivity, is an indispensable mineral with a critical role in the electrical grid as well as electricity generation and consumption. Copper is highly abundant but only found under certain geological conditions in sulfide and oxide ores. Global demand for copper is rising due to digitalization and the transition to renewable energy.



## Countries of origin

(Share of global mining/processing)

● Top 3 mining countries ● Top 3 smelting and refining countries ■ Both Source: USGS, 2024 estimates.

## Key material-specific risks

### Environment

- Air pollution
- Water pollution and consumption
- Handling and disposal of waste
- Destruction of forests and soils
- Loss of biodiversity

### Human Rights

- Child labor
- Forced or compulsory labor

### Community Life

- Protection of the rights of indigenous peoples
- Causing harmful environmental change



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## Copper in our Supply Chain



Copper's high thermal and electrical conductivity has made it an indispensable metal for the automotive industry, and it is used in a wide variety of parts and components. Copper production is more geographically diverse than other critical metals, with Latin America and China accounting for a large portion of global supply. However, automotive demand for copper will continue to grow as copper has become the material of choice to increase energy efficiency in electric vehicles. The Volkswagen Group did not directly source any copper in 2024.

## Risk Assessment

Copper extraction and processing poses a number of environmental risks that affect local ecosystems and communities. The scale of open-pit mining requires significant land use, resulting in deforestation, loss of wildlife habitat and biodiversity, and adverse impacts on neighboring and indigenous communities. Copper extraction is typically water-intensive and involves leaching with sulfuric acid, which can lead to acid drainage, further impacting local communities, particularly in areas of high water stress. Copper processing is also energy- and chemical-intensive. In areas of high water stress, copper mining can be a source of conflict. In the past, some protests by local communities have led to unrest and production halts involving public and private security forces. Consequently, ten of the risk categories identified as relevant for copper were also identified as being high-risk. As demand for copper continues to increase, new potential risks are emerging within the supply chain. For example, tensions between formal mining

(mostly large-scale) and informal, artisanal and small-scale mining (ASM) have increased in Peru.

## Risk Mitigation

The Volkswagen Group remains committed to socially and environmentally responsible copper mining and processing. While complete transparency of the supply chain is not possible due to the complexity of copper supply chains and the wide use of copper by many actors in the value chain, we attach great importance to active participation in cross-industry initiatives, such as  **The Copper Mark** and the  **RMI** working group for copper, as well as close cooperation with the top suppliers of the Volkswagen Group's focus parts.

Implementing stringent standards is key to sustainable processes across copper value chains. We engage with The Copper Mark, an assurance framework aiming to bring responsibly sourced copper to the market. Currently, 38% of the world copper mine output is produced from The Copper Mark's sites (around 80% of mine output in Chile).

On behalf of the Volkswagen Group, Audi and MAN are partners of The Copper Mark, with Audi having a seat on the advisory council. We participate in regular meetings, providing a downstream perspective of The Copper Mark's assurance process and the chain-of-custody standard.

Together with the RMI, The Copper Mark has established a set of criteria for the responsible production, sourcing, processing and recycling of minerals and metals (Risk Readiness Assessment, RRA). Going forward, The Copper Mark will also continue working with the International Council of Minerals and Metals (ICMM), the Mining Association of Canada (MAC) and the World Gold Council (WGC) to consolidate their four different voluntary responsible mining standards into one global standard and multi-stakeholder monitoring system in the Consolidated Mining Standard Initiative (CMSI). By simplifying standards and removing barriers to implementation,

## Stakeholder Engagement

- Ongoing and active participation in The Copper Mark (advisory council and working group) and in the RMI working group for copper
- Ongoing dialogue with the top suppliers of wiring harnesses to the Volkswagen Group

## Outlook 2025

We plan to

- continue our collaboration with focus suppliers and give them a deeper understanding of our expectations regarding responsible copper sourcing
- continue our work with initiatives such as The Copper Mark, the RMI and the new CMSI
- pilot a sustainability specification sheet for copper

the CMSI aims to extend responsible mining practices to a wide range of mining companies worldwide. The new standard is expected to be finalized in 2025. Audi participated in the consultations on the new standard.

Audi is currently working on a specification sheet with sustainability requirements for copper, with a pilot project planned for 2025.

### KEY APPLICATIONS

- Wiring harnesses
- EV engines
- Starters, generators





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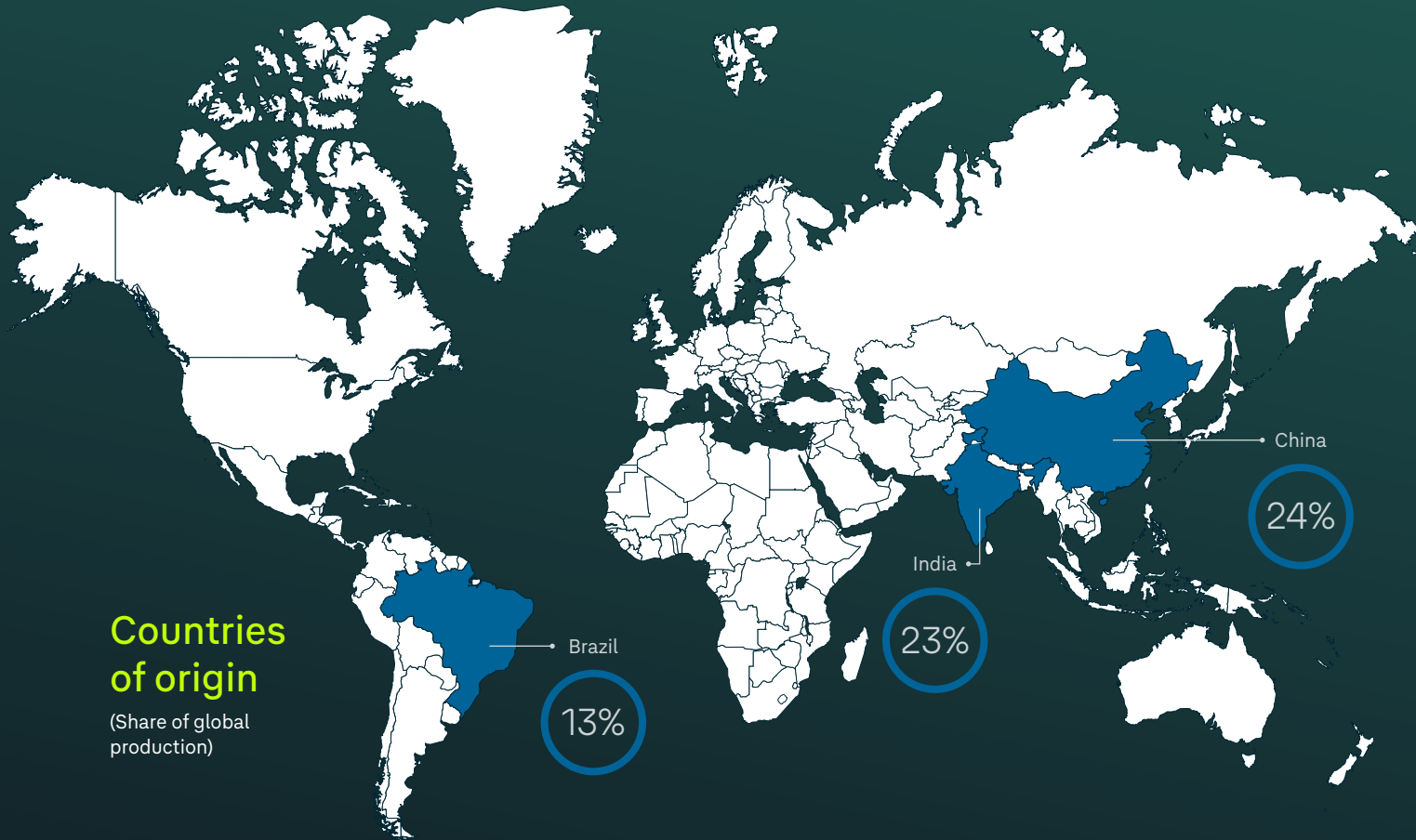
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# → Cotton

Cotton is a soft, fluffy fiber that grows in a boll around the seeds of cotton plants. The fiber is almost pure cellulose and is most often spun into yarn or thread for textile products. Cultivation requires a long frost-free period, plenty of sunshine and moderate rainfall while substantial amounts of water are needed to produce cotton textiles. In addition to the textile industry, cotton is a highly versatile crop used for nets, filters and cotton paper as well as in bookbinding. In many countries, cotton significantly contributes to the livelihoods of millions of rural smallholders.



● Top 3 production countries

Source: Bulk Cotton, 2024 estimates.

Other Raw Materials **Cotton**

## Key material-specific risks

- For virgin cotton
- For virgin and recycled cotton

### Environment

- Production and use of pollutants
- Air pollution
- Water pollution and consumption
- Soil pollution and land degradation
- Loss of biodiversity

### Human Rights

- Child labor
- Forced or compulsory labor
- Support to armed groups
- Any form of discrimination
- Health and safety
- Trade union freedoms
- Payment of appropriate wages



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## Cotton in our Supply Chain

The typical supply chain for cotton textiles and products includes various steps from cotton farming, ginning, spinning and processing through to manufacturing. The structure of the cotton supply chain varies greatly by region, with multiple types of farms and production. While smallholders account for the majority of global cotton production, there is a degree of vertical integration in processing and manufacturing, and these steps are relatively concentrated in a few countries. China, India, Brazil, the United States and Pakistan are the world's top cotton producers.

As our analysis has shown, the Volkswagen Group primarily uses recycled cotton (together with synthetic fibers) for the vehicle focus parts in the scope of our risk assessment. We do not source virgin or recycled cotton directly. The main countries of origin for the secondary material used in vehicle

### KEY APPLICATION

- Engine compartment insulation
- Interior trims
- Floor mats
- Workwear and personal protective equipment

parts are Germany, Slovakia and Turkey. For non-vehicle parts, we source products made from virgin cotton, e.g. workwear or personal protective equipment (PPE).

## Risk Assessment

Cotton has been added to the Volkswagen Group's list of priority raw materials for the 2023 reporting period. In light of increasing supply chain regulations such as the Uyghur Forced Labor Prevention Act (UFLPA) and other human-rights-related regulations, we directed our focus to assessing the risks associated with the deeper levels of our cotton supply chains. Supply chains are fragmented, spanning multiple regions and stages of commodity trade. In addition, fibers from several sources and countries may be combined into a single textile product, further complicating traceability.

For virgin cotton, the Volkswagen Group has identified and prioritized impacts on human and workers' rights as the most salient risk areas, with negative environmental impacts adding to these. For recycled cotton, environmental risks are considerably lower, while workers' rights remain a key risk area for these materials.

As a first step in the reporting year, the Volkswagen Group focused on identifying those parts containing cotton where we see opportunities to make an impact. We then contacted internal and external stakeholders to determine whether the cotton used was virgin or recycled. The results of our findings showed that the cotton sourced for the vehicle focus parts and by our focus suppliers is sourced from recycled material.

## Stakeholder Engagement

- Dialogue with tier-1 and tier-2 suppliers of cotton
- Exchange with companies from different industries (FMCG, furniture) that are active in cotton and circular materials to learn about their responsible sourcing requirements
- Discussions with intergovernmental organizations like OECD about existing best practices
- Discussions with circularity initiatives and certification schemes about the current requirements that can be enforced through second- or third-party audits

This has implications for our risk landscape, as the most salient and systemic risks are associated with the farming and processing stages of virgin cotton. Understanding this will have a significant impact on our overall approach to managing the risks associated with cotton.

For 2025, we plan to further understand and assess the risks associated with our recycled cotton supply chains while also aiming to map the virgin cotton supply chains connected to non-vehicle parts such as workwear and personal protective equipment (e.g., gloves).



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## Risk Mitigation

In the absence of traceability, the Volkswagen Group is currently focusing on supply chain mapping and data collection through our tier-1 suppliers. We are also assessing the feasibility of requesting **sustainable sourcing criteria** for both recycled cotton and virgin cotton used for workwear.

Many multi-stakeholder **sustainability initiatives** have emerged in the cotton industry, with mostly textile companies involved as members. There are several certification schemes for cotton textile and apparel products but fewer credible sustainability standards for circular supply chains with a particular focus on human rights. The Volkswagen Group is currently in discussions with circularity initiatives to evaluate the opportunities of cross-industry exchange.

The Volkswagen Group is actively exploring the potential for using more sustainable fabrics in vehicle interiors, including the feasibility of recycling discarded assembly line workwear and turning it into a blended fiber yarn which can then be reused for seat covers. Further efforts will be made to promote the use of recycled materials while maintaining highly durable, timeless products that meet customer expectations.

With cotton being a new priority material in 2024, we conducted internal training sessions on cotton supply chains within the procurement department to raise awareness for issues in the cotton supply chains. We also shared our findings with three of our tier-1 suppliers.

## Outlook 2025

We plan to

- map supply chain actors beyond tier 2
- start outlining and implementing risk mitigation measures
- engage with initiatives for virgin cotton and circular materials
- develop and pilot a specification sheet for cotton to be used for workwear sourcing



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# → Leather

Leather is a versatile material that has been used for centuries in various applications from clothing, footwear and accessories to upholstered furniture and vehicle interiors. It is stable and firm, flexible and durable.



The available data on global leather production and tanning does not exclusively represent figures for the automotive industry. Not every cowhide is suitable and used for leather production and not every cowhide is used in the automotive sector. For these reasons, we decided not to report any data on leather production or tanning.

## Key material-specific risks

### Environment



— Water pollution and consumption



— Soil pollution and land degradation  
— Loss of biodiversity

### Human Rights



— Health and safety  
— Payment of appropriate wages





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## Leather in our Supply Chain

The Volkswagen Group's brands use bovine leather as a preferred material for vehicle interiors because of its aesthetic qualities combined with its durability and flexibility. As we aim to source locally, close to the respective production sites of our vehicles ("local for local" principle), the majority of the Volkswagen Group's direct leather suppliers are based in Europe and source their hides from the region. The hides go through a series of processes, including pre-treatment, tanning and finishing, to transform them into leather and then into the final product. Some automotive interior leather companies are vertically integrated, owning both tanneries and, for example, vehicle seat companies.

## Risk Assessment

Global leather supply chains face a number of sustainability challenges. The use of hazardous chemicals in the tanning and finishing process poses health and safety risks to workers. In addition, leather production is associated with environmental risks related to land use, CO<sub>2</sub> emissions, and water consumption for livestock farming and wastewater from tanneries. These adverse environmental impacts can also cause a negative impact on local and indigenous communities. The Volkswagen Group has identified water pollution, adverse impacts on biodiversity, and threats to workers' occupational health and safety and animal welfare as the most systemic and salient risk areas for leather.

In the reporting year, we continued to drive transparency in our leather supply chain through regular supply chain

mapping and the collection of additional supply chain data. For this, we worked with our direct suppliers as well as reviewed analyses and sector studies, such as from Drive Sustainability's Raw Material Outlook, the World Wide Fund for Nature (WWF) and the Leather Working Group (LWG).

## Risk Mitigation

The Volkswagen Group is working towards traceability and improved sustainability in the leather supply chain through direct contact with its suppliers and contractual requirements.

Our **leather specification sheet** requests that our direct suppliers of parts containing leather meet a number of leather-specific sustainability requirements. They have to specify all companies and locations where tanning, re-tanning and finishing process steps are carried out and provide transparency on the rawhide provenance (countries of origin). In addition, a leather-specific sustainability certificate at the LWG bronze level or higher is required. Rawhides and upstream material associated with illegal deforestation are excluded. Only rawhides from food production (by-products) may be used; breeders have to comply with the "Five Freedoms of Animal Welfare" defined by the Animal Welfare Committee.

We do not generally exclude high-risk areas, such as regions in Brazil and Paraguay, as sources of origin for leather products. Instead, we aim to establish traceability and implement enhanced due diligence measures such as sub-supplier audits, sourcing from certified sources and the use of appropriate geo-fencing systems where rawhides or upstream materials are sourced in high-risk countries.

The specification sheet was reviewed in 2024. With the update planned for early 2025, we aim to further raise the level of ambition and introduce additional risk mitigation measures. In the future, the leather for our products can only be produced in tanneries certified according to the gold standard of the LWG.

### KEY APPLICATIONS

- Seats
- Steering wheels
- Interior components


## Stakeholder Engagement

- Ongoing dialogue in the Leather Working Group
- Engagement with NGOs such as the WWF for expert guidance on furthering our sustainability requirements

## Outlook 2025

We plan to

- roll out an updated leather specification sheet with ambitious requirements
- work towards traceability across the supply chain in close collaboration with our suppliers

Since 2023, all Volkswagen Group brands have been members of the  **Leather Working Group (LWG)**, whose members represent more than one quarter of finished leather production around the globe. The non-profit organization works to facilitate a chain of custody and common environmental and social standards for leather supply chains around the world. Even before the Volkswagen Group joined the LWG, most of our leather suppliers' sites were certified according to the LWG audit standard. The audit includes strict criteria, for example on water use and prevention of water pollution in the tanning process as well as health and safety measures for workers that must be adhered to.



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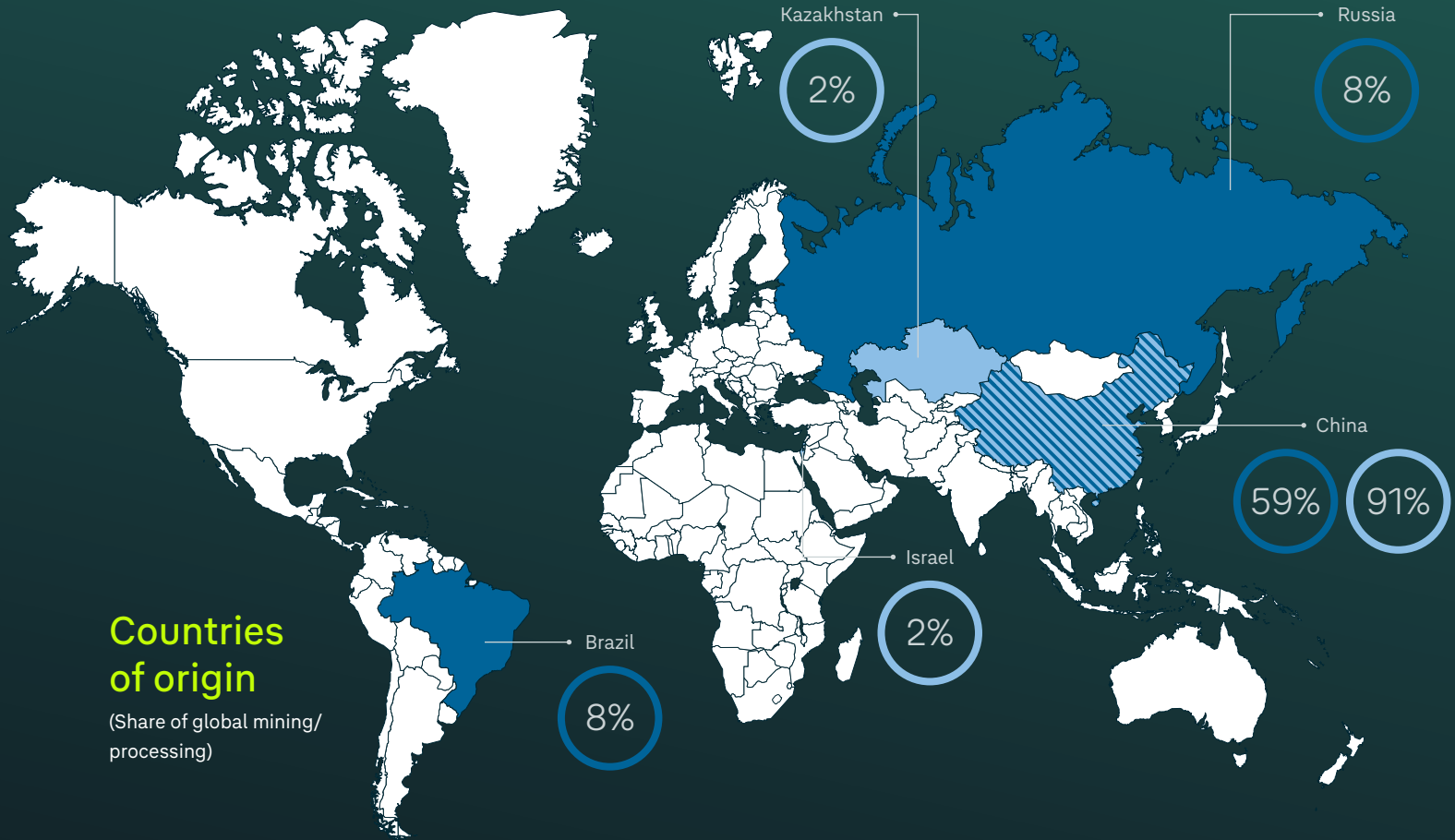
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# → Magnesium

Magnesium is an alkaline earth metal with high chemical reactivity, a low melting point and low density. The shiny gray metal is used in many applications where reduced weight is important. Magnesium is used primarily as a component in strong and lightweight alloys that contain aluminum. Magnesium is highly abundant within the earth's crust. However, it must be processed to be available in its pure form. This is done through various highly energy-intensive methods, including electrolysis and thermal reduction.



## Countries of origin

(Share of global mining/processing)

● Top 3 mining countries ● Top 3 smelting and refining/processing countries ■ Both Source: USGS, 2024 estimates.

## Key material-specific risks

### Environment



— Air pollution



— Water pollution and consumption



— Soil pollution and land degradation

### Human Rights



— Torture  
— Forced or compulsory labor  
— Any form of discrimination



— Health and safety  
— Trade union freedoms  
— Payment of appropriate wages

### Community Life



— Protection of the rights of indigenous peoples



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## Magnesium in our Supply Chain

Magnesium is the third-most commonly used structural metal (after steel and aluminum). In a typical vehicle, it is usually used in alloys, such as magnesium die cast alloys and aluminum alloys. Magnesium is primarily contained in lightweight components such as steering wheels and wheels, but also display frames and consoles. Magnesium is widespread, and global reserves can be considered almost infinite. However, global production is highly concentrated in Yulin, China. The Volkswagen Group sources magnesium indirectly in aluminum alloys and various components.

## Risk Assessment

With the ongoing trend toward lightweighting, magnesium has become a critical raw material, making it essential to assess and manage the risks associated with its upstream supply chain. Therefore, magnesium was added to the Volkswagen Group's list of priority raw materials in 2023.

### KEY APPLICATION

- Steering wheels
- Display frames
- Wheel rims
- Center consoles

The magnesium supply chain is highly fragmented, with production concentrated in China. As a result, it is challenging to achieve transparency and mitigate risks at deeper levels of the supply chain. In the reporting year, we concentrated on identifying our magnesium focus parts and suppliers and conducting an initial in-depth analysis of the risk situation within the magnesium supply chain. This was done through desk research as well as dialogues with focus suppliers of magnesium and aluminum components and with Drive Sustainability.

The Volkswagen Group has identified adverse environmental impacts such as CO<sub>2</sub> emissions and severe water and soil pollution as areas of high concern. Magnesium production is also associated with potential violations of human and labor rights, particularly where there is a lack of labor law enforcement.

During the reporting year, we initiated a research project with external experts for magnesium as well as graphite and rare earth elements in order to gain market insight into sector dynamics and better understand the impact of the risks that arise, particularly for the Chinese region. The project was carried out jointly for the raw materials magnesium, graphite and REE. We also engaged in a workshop with the German Raw Materials Agency (DERA) for valuable insights into the material flows of the bauxite and magnesium used for aluminum alloys and the risks related to specific regions.

## Risk Mitigation

In 2025, we will begin to outline and implement risk mitigation measures after assessing the key risks associated with the magnesium supply chain.

## Stakeholder Engagement

- Dialogue with tier-1 and tier-2 suppliers of magnesium and aluminum
- Workshop with DERA on the material flows of bauxite and magnesium

## Outlook 2025

We plan to

- start outlining and implementing risk mitigation measures
- continue the research project on China for magnesium, graphite and rare earth elements



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# → Mica

Mica is a group of 37 silicate minerals with a layered or platelike texture. Mica minerals occur as flake and scrap mica as well as sheet mica. Mica is used in a variety of consumer goods, from paints and cosmetics for its shimmering effect to electronic devices for its heat resistance and low thermal and electrical conductivity.



Due to the complex data situation for mica, we decided not to list mica mining and processing countries.

## Key material-specific risks

### Environment



- Soil pollution and land degradation
- Loss of biodiversity

### Human Rights



- Child labor
- Forced or compulsory labor
- Any form of discrimination



- Health and safety
- Freedom of association
- Payment of adequate wages





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## Mica in our Supply Chain

The Volkswagen Group uses mica in various parts of its vehicles for both its shimmering effect and its heat resistance and low conductivity. Key areas of application include vehicle paints and thermal isolation for battery raw materials. Muscovite and phlogopite are the commercially most relevant types of mica; both of them are used in the automotive industry. The Volkswagen Group currently does not source mica directly.

## Risk Assessment

Mica supply chains can be complex and potentially impose social and environmental risks them: human rights abuses, child labor, and health and safety risks. Reports of such risks focus on Madagascar and India (particularly on the states of Jharkhand and Bihar, known as the mica belt). As income opportunities in these regions are limited, mica mining is an important livelihood for many people. Mica is mostly mined in a labor-intensive process in artisanal and small-scale mines (ASM). Child labor and health and safety risks are often directly linked to the low standard of living in the villages. Due to the large number of small mines, traceability is poor and there is a potential risk of illegal and unregulated mining operations.

### KEY APPLICATIONS

- Paint
- Thermal isolation material for batteries

In the reporting year, in order to assess current and emerging risks in our upstream mica supply chains for our focus parts, we continued our exchange with tier-1, tier-2 and tier-3 suppliers to support them in mapping their supply chains. In addition, we also continuously monitor and analyze media reports and research publications.

## Risk Mitigation

The lack of transparency in mica supply chains is a known issue, and direct stakeholder engagement is key to mitigating the upstream risks. Together with our suppliers, international initiatives and NGOs, we aim for positive change in mining countries and increased transparency throughout the supply chain. Our approach is to empower local mica workers, to encourage the establishment of common standards and to promote transparency through collaboration.

On behalf of the Volkswagen Group, Porsche is a member of the  **Responsible Mica Initiative**, a growing multi-stakeholder coalition that aims to establish fair, responsible and sustainable mica supply chains in India and Madagascar. In the reporting year, a representative of Porsche continued to serve on the Board of Directors, and we participated in several working groups. Among other activities, we worked to support the continuous development of the “Global Workplace ESG & Due Diligence Standard for Mica Processors” and to develop legal frameworks to help legalize informal mines. We also continued to support the development of the Responsible Mica Initiative's supply chain mapping and traceability system.

## Stakeholder Engagement

- Ongoing dialogue with tier-1 and tier-n suppliers of the Volkswagen Group on due diligence measures and transparency efforts
- Continued work with international initiatives and with NGOs to better understand upstream social and environmental challenges
- Field visit to India to engage with local processors, communities and other stakeholders in order to deepen our understanding of mica-specific challenges
- Engagement with other OEMs and NGOs in the German Sector Dialogue on mica-related challenges in Madagascar

## Outlook 2025

We plan to

- expand our engagement with stakeholders in Madagascar
- continue to raise awareness of and participate in the Responsible Mica Initiative
- strengthen our relationship with Chinese intermediaries to raise awareness of sustainability challenges in the upstream mica supply chain and collaborate on establishing responsible mica supply chains
- continue working with our suppliers on transparency and promote the implementation of standards



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In 2024, together with the [Alliance for Responsible Mining \(ARM\)](#), the Responsible Mica Initiative developed a dedicated standard for artisanal and small-scale mica mines in Madagascar, which was published in early 2025. Based on the existing international Code of Risk-mitigation for ASM engaging in Formal Trade (CRAFT) developed in 2023, the "Mica CRAFT" is adapted to the specificities of mica in Madagascar and aims to incorporate ASM into legal supply chains. The project was supervised by an external steering committee, of which Porsche was a member.

Our representatives also took part in the Responsible Mica Initiative's community empowerment programs for mica-dependent villages in Jharkhand and Bihar, India, and supported a pilot project in Madagascar. In addition, Porsche is currently supporting the development of long-term measures to improve the working conditions of mica workers in artisanal and small-scale mining in Madagascar. In addition, the **Responsible Mica Initiative** is looking to deepen its exchange with mica processors in China to raise awareness for the sustainability risks that can be associated with the upstream mica supply chain.

On behalf of the Volkswagen Group and within the [Responsible Minerals Initiative \(RMI\)](#), Porsche continued to take part in the working group "Emerging Minerals Group — Mica Team" and participated in regular sessions to align and promote risk mitigation measures and audit strategies for the responsible sourcing of mica.

Mica was also one of the 2024 focus materials of the [German Automotive Sector Dialogues](#) on the implementation of the National Action Plan for Business and Human Rights (NAP). Porsche participated in a working group on mica in Madagascar to develop a common understanding and identify possible actions for 2025.

A tool to support sustainability in the supply chain is our **mica specification sheet**, which was rolled out across the Volkswagen Group in 2023 and contains binding sustainable sourcing requirements for suppliers of parts and materials containing mica. The requirements include transparency and compliance

with the Responsible Mica Initiative's "Global Workplace ESG & Due Diligence Standard for Mica Processors". If mica is sourced from high-risk regions such as India, Madagascar, China or Brazil, further due diligence measures such as mapping audits and audits at mine sites are required.

### Community Empowerment in India

HIGHLIGHT

In 2024, Porsche representatives undertook a field trip to three states in India, organized in part by the Responsible Mica Initiative, to visit local mica-dependent communities and processors and to meet with NGOs and government agencies. During the trip, we visited multiple processing units in Jharkhand and Rajasthan as well as a medium-scale mine site in Rajasthan and gained insight into the local mica industry. In addition, we engaged with mica-dependent communities in Jharkhand and Bihar. This allowed us to further deepen our understanding of the social challenges faced by affected communities. We also visited the Responsible Mica Initiative's community empowerment project in the Koderma and Giridih regions of Jharkhand. In total, nearly 180 villages have already benefited from this program, which aims to eradicate child labor in the mica mines and provide decent working conditions for mica miners. The program enables people in the communities to diversify their sources of income through training workshops and access to education for children.



180  
villages have benefited  
from the program



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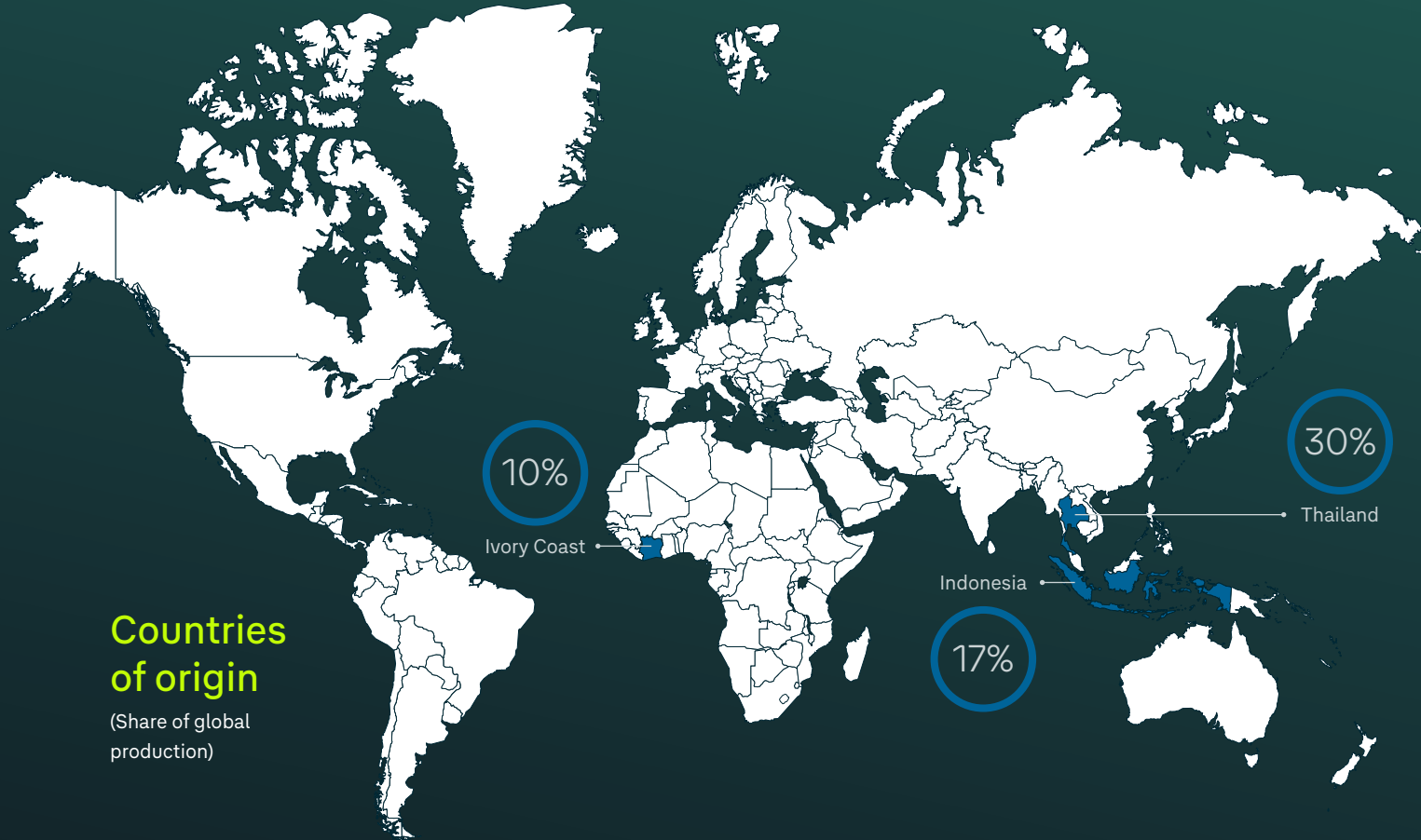
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# → Natural Rubber

Natural rubber is derived from the rubber tree *Hevea brasiliensis*, grown primarily in the tropical regions of Southeast Asia and West Africa. It is a key raw material in tires and other products due to its wear resistance.






## Countries of origin

(Share of global production)





● Top 3 production countries Source: FAO, 2023.

## Key material-specific risks



### Environment

-  — Hazardous substances
-  — Soil pollution and land degradation
-  — Loss of biodiversity

### Human Rights

-  — Child labor
-  — Forced or compulsory labor
-  — Health and safety
-  — Payment of appropriate wages

### Community Life

-  — Forced evictions or expropriations
-  — Protection of the rights of indigenous people





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## Natural Rubber in our Supply Chain

Rubber is a key raw material for the automotive industry. More than 70% of the world's natural rubber is used in tire production. Natural rubber can withstand both heat and cold, and the strength of rubber is the key to the tires' durability and ability to support the vehicle's load. Besides tires, rubber is also used for other vehicle parts such as seals, bearings, brake pads, wiper blades, mats and electrical wire covers. The Volkswagen Group does not directly source natural rubber.

## Risk Assessment

The Volkswagen Group has identified hazardous substances, pollution and land degradation as the most salient and systemic environmental risks. These risks have an adverse impact on biodiversity as well as on the indigenous and local communities in the regions. The most salient and systemic social risks along our natural rubber supply chain are child labor and forced labor, payment of adequate wages, and health and safety.

Achieving full traceability for natural rubber is challenging due to the highly complex and fragmented nature of the supply chain and also the sheer number of vehicle parts containing rubber. Another challenge is that, for purchased products, it is not immediately obvious whether they contain natural or synthetic rubber.

Global production of natural rubber involves millions of small rubber tree plantations around the world, and from there the rubber passes through multiple trading and processing companies before reaching manufacturers of tires and other products. Therefore, the Volkswagen Group is continuing to work closely with its key tier-1 suppliers to drive transparency and assess risks.

### KEY APPLICATION

— Tires

## Supporting Smallholder Farmers in Sumatra, Indonesia

On behalf of the Volkswagen Group, Porsche is one of the founders of CASCADE, a capacity-building project in the province of Jambi in central Sumatra, Indonesia, launched together with the global tire manufacturer Michelin. The project aims to enable smallholders to increase their yields and incomes while improving their cultivation practices. Since 2021, the program has successfully trained more

than 1,000 local farmers. Following a visit to Indonesia in November 2023, the partners committed to continuing the project for another three years. The plan is to reach an additional 5,500 farmers in the Jambi province. For 2025, the project activities will be expanded to include additional modules and formats to train natural rubber farmers and to support them in their journey towards better livelihoods.

HIGHLIGHT

Training for  
**1,000**  
local farmers to  
help improve their  
working and living  
conditions







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In 2024, in order to comply with the EU Deforestation Regulation (EUDR), we broadened our scope to assess risks not only for the prioritized application in tires, but also for the many other rubber-containing parts. As a first step, we focused on identifying the direct suppliers in scope and began preparing to map their upstream supply chains. For this purpose, we started to use a software platform which helps collecting data and

perform risk management using AI tools and satellite geolocation data for a large number of suppliers in scope. Through the platform and with the help of defined internal processes, we strive to efficiently collect the necessary information and assess the risks. Going forward, the IT solution will also support the creation of due diligence statements for EUDR-relevant products to ensure deforestation-free processes.

## Risk Mitigation

In 2024, our activities focused on preparing for the requirements of the new EUDR by establishing the necessary internal structures and processes. This included, for example, the implementation of an IT-based traceability system (see above) and the development of a compliance management system.

The main mitigation measure continues to be the Committed Actions for Smallholders Capacity Development (CASCADE) project, which continued to work on the ground in Indonesia with the goal of supporting smallholder farmers on their path to sustainability (see → [highlight box on page 58](#)).

During the reporting year, the Volkswagen Group launched a pilot project for the **natural rubber specification sheet** in the tire supply chain. The specification sheet requires suppliers to take measures to improve transparency within their natural rubber supply chain and ask them to establish an appropriate due diligence management system according to the criteria of the OECD Guidance for Responsible Agricultural Supply Chains. The goal is to assess and mitigate risks in their upstream natural rubber supply chain. The specification sheet is based on the Global Platform for Sustainable Natural Rubber (GPSNR) reporting system and follows a mindset of continuous improvement.

## Stakeholder Engagement

- Ongoing collaboration with our tier-1 tire suppliers, including on the EUDR
- Active engagement as a member of the GPSNR and in working groups
- Working with partners and stakeholders to build capacity for sustainable rubber in Indonesia

## Outlook 2025

We plan to

- focus on implementing EUDR requirements, including an IT tool for risk management
- actively engage in expanding the CASCADE project by implementing additional measures
- continue to participate in the GPSNR

We also continued to engage as a member of the GPSNR, a multi-stakeholder organization focused on enabling responsible sourcing and defining a sustainability framework for the natural rubber sector. Currently, 60% of the world's natural rubber demand is from GPSNR members.

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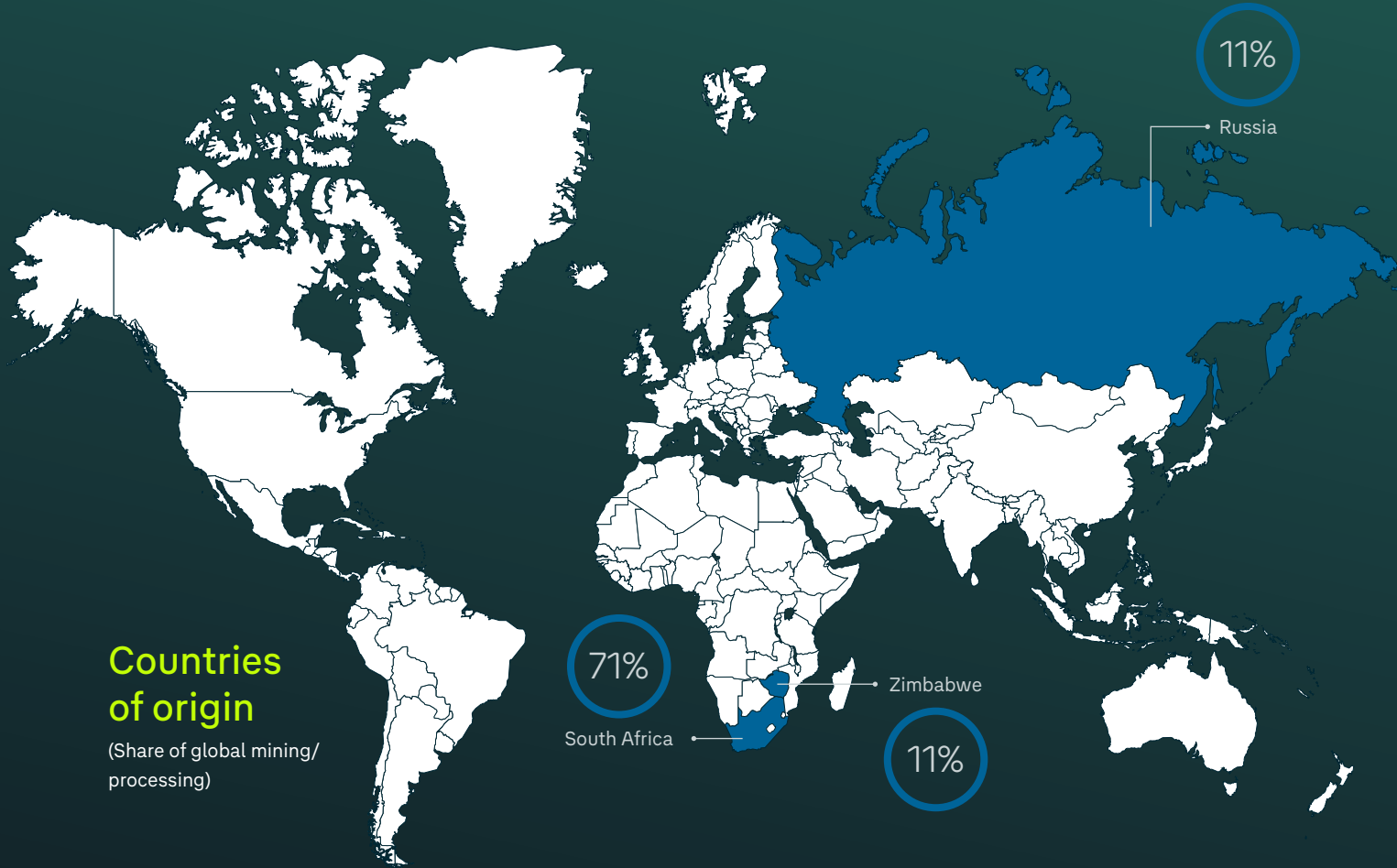
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# → PGM

PLATINUM GROUP METALS

Platinum Group Metals (PGM) — platinum, palladium, rhodium, ruthenium, iridium and osmium — are precious metals that occur together in nature and are produced from the same ore. PGMs are the densest known metal elements and exhibit high corrosion resistance and high durability. They are sought after for various applications and, due to their high value, are often recycled.



● Top 3 mining countries Source: USGS, 2024 estimates.

## Key material-specific risks

### Environment

- Air pollution
- Water pollution and consumption
- Soil pollution and land degradation

### Human Rights

- Support of public or private security forces
- Any form of discrimination
- Health and safety

### Community Life

- Protection of the rights of local people



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## PGM in our Supply Chain

The automotive industry is the main user of platinum group metals — in catalytic converters to treat exhaust emissions. The Volkswagen Group expects global demand for PGM to decline in the coming years due to the phase-out of combustion engines in vehicles and therefore catalytic converters.

The supply chain for PGM is complex, particularly at the refining and processing level. For indirectly sourced PGM, we have not yet been able to gain full transparency in our supply chains.

## Risk Assessment

The Volkswagen Group systematically analyzes the risks associated with the extraction and processing of platinum group metals. Currently, our risk assessment focuses on collecting transparency data through media monitoring and direct supplier engagement. We have identified and prioritized impacts on human rights and local communities in addition to adverse environmental impacts as the most salient risk areas.

The mining of PGM is both labor- and capital-intensive; often PGM are mined as by-products of copper and nickel in both open-pit and underground mining. Although mining of PGM occurs in a few countries, most production is concentrated in South Africa. There, the sector has historically been associated with low wages, occupational health and safety concerns,

### KEY APPLICATION

#### — Catalytic converters

labor rights violations, and recurring cycles of violence at the mine sites and in the local communities. These human rights risks have their roots in a multi-faceted and complex context that is historically linked to conflict lines ranging from apartheid to informal settlements of migrant workers, lack of education, high unemployment and poverty. With mines nearing the end of their lifecycle and mining activity due to be scaled back over the next few years, people in mining-dependent communities are facing an uncertain future. While PGM mining is not the cause of these problems, we will need to mitigate the risk of PGM mining as a contributor to these negative social and human rights impacts if we are to achieve a sustainable supply chain.

## Risk Mitigation

To manage the risks in our supply chain, we consistently look beyond our tier-1 suppliers to see where the risk of adverse impacts is greatest and where we should therefore focus our mitigation efforts. In 2024, the Volkswagen Group continued its engagement with various supply chain actors and global initiatives, with a particular focus on the PGM mining sector in South Africa. On behalf of the Volkswagen Group, Scania is involved as one of the partners and co-founders of the **Marikana Coalition** project (see → [highlight box on page 62](#)), which aims to support long-term goals such as reducing unemployment and providing after-school activities and career support. During the reporting period, Scania also continued its involvement with other **global and local networks** such as NIR (International Council of Swedish Industry), a member-based organization that promotes sustainable business in complex markets, and Business Sweden's global Sustainable Mining Program.

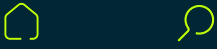
## Stakeholder Engagement

- Ongoing dialogue with PGM suppliers, down to the mine site level
- Continuing engagement with key members of the Marikana Coalition, including a visit to Scania by one of the partners
- Dialogue with manufacturers to discuss the requirements of the PGM specification sheet

## Outlook 2025

We plan to

- continue engagement with affected stakeholders, prioritizing stakeholders in South Africa
- continue supporting and monitoring the Marikana Coalition project
- work with members of the IPA on sector-wide risk mitigation efforts
- encourage mining companies to meet the IRMA standards and become IRMA-certified



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## Leaving a Positive Legacy in Marikana, South Africa

In 2024, Scania continued to support the Marikana Coalition, an initiative launched in 2023 in order to support sustainable social development of mining and mining-impacted communities in South Africa. Scania works with Sibanye-Stillwater, the NGO Afrika Tikkun, the Mineworkers Development Agency (MDA) and other stakeholders to give children education for a future beyond mining in a region with high rates of unemployment, a chronic lack of schools and many other social problems.

The project is turning an unused mine building into an educational facility for children in the platinum-mining town of Marikana. The new youth center was opened in June 2024 and provides after-school support, career and employment guidance, and occupational training as well as a safe social hub for young people in the community. The center is staffed by employees from a local unemployment program who received training in leadership and management skills through an intensive two-week workshop. After a successful start, an expansion of the building is now planned for 2025.

In June 2024, Scania's managing director in South Africa attended the ribbon-cutting ceremony for the launch of the Marikana Youth Centre. This event marked the inauguration of the Marikana Youth Centre and included other stakeholders involved such as Sibanye-Stillwater and Afrika Tikkun.



HIGHLIGHT

In 2024, the pilot project for a **PGM specification sheet** was finalized at Scania and discussed with all major tier-2 suppliers. The specification sheet includes sustainability requirements for the procurement of focus parts containing PGM, such as transparency, certification and audit requirements in line with industry good practices (such as IRMA standards). Another requirement is conforming to the London Platinum and Palladium Market (LPPM) Responsible Sourcing Guidance, which demands tier-2 suppliers to source exclusively from refiners that have undergone a due diligence audit and have therefore provided proof of adequate human rights due diligence management systems.

The Volkswagen Group is also continuing to encourage PGM mining companies in the supply chain to undergo or prepare to undergo an **IRMA audit**. For directly procured PGM, an IRMA audit is one of the contractual requirements for the mine sites. PGM-mining companies are becoming more open to audits, and the majority is committing to the IRMA approach. So far in South Africa, one mining company completed audits for three of its mine sites in 2024, while two sites of another company are currently being audited. More information regarding IRMA certification of mine sites can be found on the websites of the [International Platinum Group Metals Association \(IPA\)](#) and [IRMA](#).





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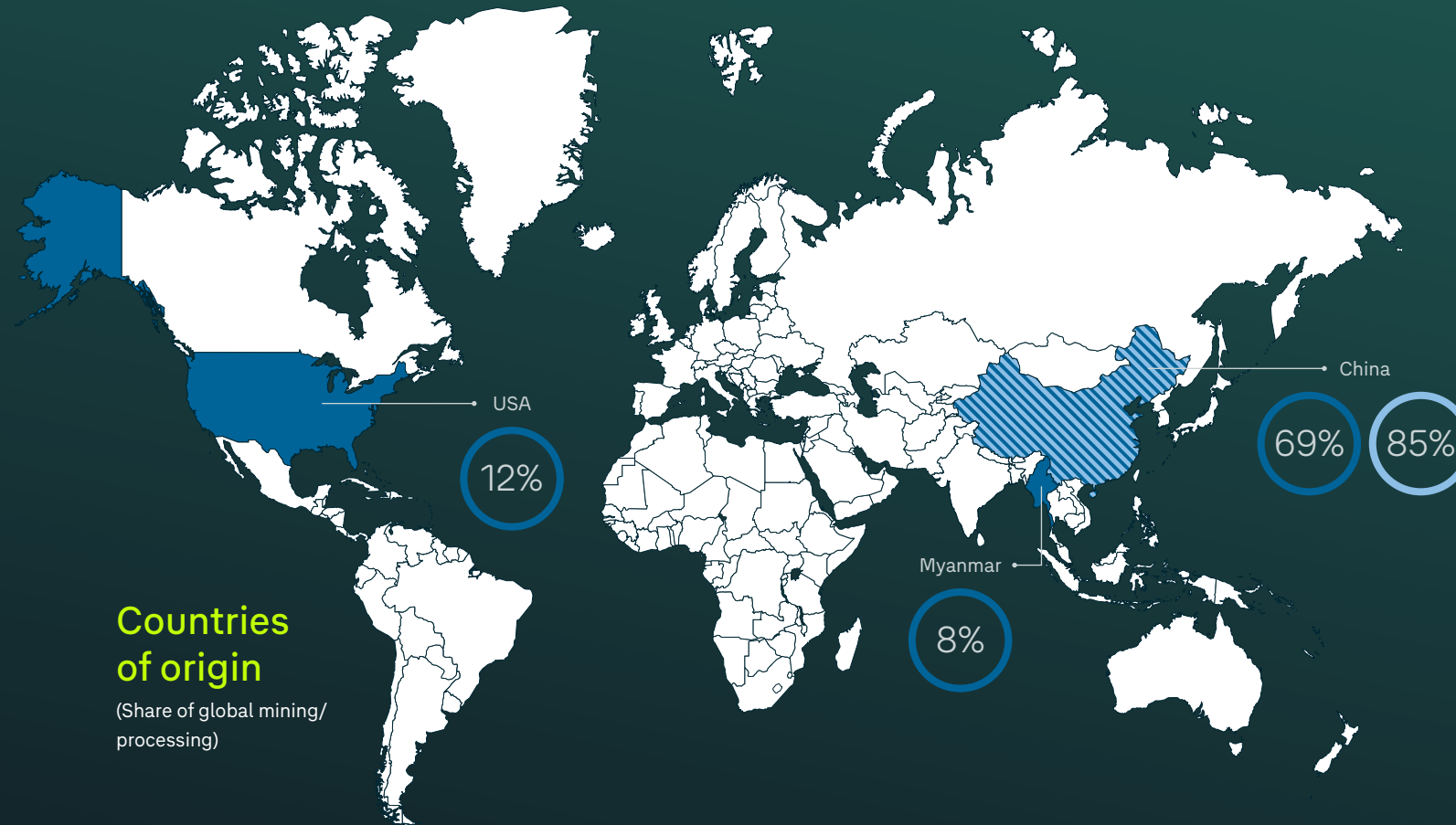
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# → REE

RARE EARTH ELEMENTS

Rare earth elements refer to a group of 17 chemical elements: the group of 15 lanthanides plus scandium and yttrium. REE are not as rare as the name may imply, but minable concentrations are low and the process of separating them from other elements is technically challenging and complex. REE are valued for their conductive and magnetic properties. They are used in many electronic devices, from smartphones to electric engines and LCD screens.



● Top 3 mining countries

■ Top 3 mining countries and top smelting and refining/processing country

Sources: USGS, 2024 estimates; Rare Earth Exchange, 2025.

## Key material-specific risks

### Environment



- Hazardous substances
- Air pollution



- Water pollution and consumption



- Handling and disposal of waste



- Soil pollution and land degradation
- Loss of biodiversity

### Human Rights



- Child labor
- Forced or compulsory labor
- Support of armed groups



- Health and safety



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## REE in our Supply Chain

Within the Volkswagen Group, rare earth elements (REE) are mainly used for permanent magnets in electric vehicles. In addition, rare earth oxides, metals and alloys are also used in exhaust systems, catalytic converters and loudspeakers. The majority of our REE volumes are covered by four light rare earth elements: neodymium, cerium, praseodymium and lanthanum. With the shift to vehicle electrification and clean energy, we expect the demand for REE to keep rising.

The Volkswagen Group does not source REEs directly but purchases the various parts from manufacturers. Currently, China is by far the world's largest miner and processor of REE metals and alloys as well as permanent magnets, although other REE mining and processing facilities have been built around the world in recent years.

## Risk Assessment

The production of rare earths entails significant environmental and social risks. All extraction and processing methods require the use of chemicals that can cause serious water, air or soil pollution and require additional measures to protect the health and safety of exposed workers. Further risks in the REE supply chain include conflict financing and other serious human rights risks. In particular, heavy rare earth elements (HREE) mined from unregulated mines in conflict-affected Myanmar have seen a significant uptake over the past few years.

### KEY APPLICATIONS

- Permanent magnets in EVs
- Exhaust systems, front/converter
- Coating catalytic converters

In 2024, we made efforts to deepen our understanding of the REE supply chain, with its strong dependence on China. There are only few publicly available sources that provide factual and recent information on the overall sustainability situation in the Chinese REE sector. We therefore partnered with a leading global consultancy to conduct stakeholder mapping and interviews with representatives from Chinese civil society, industry and academia to complement our own desk-based assessment. While this exercise confirmed the lack of hard evidence, it also demonstrated the value and importance of conducting local stakeholder engagement, both to provide further insights and to identify actors for future collaboration on risk mitigation.

## Risk Mitigation

In the reporting year, we continued our multi-faceted approach to mitigating risks: We engaged with our direct suppliers of magnets and shared our risk assessment with them. We talked with REE suppliers outside of Chinese and European separation and recycling facilities to better understand the potential of diversifying supply chains.

We also continued to work with other OEMs through associations such as the German Association of the Automotive Industry (VDA). In the Emerging Minerals Working Group of the Responsible Minerals Initiative (RMI), we actively supported the outreach activities within the REE sector.

During the 17<sup>th</sup> Forum on Responsible Mineral Supply Chains hosted by the OECD, we exchanged views with international NGOs and civil society actors from Myanmar. The Volkswagen Group is interested in engaging in responsible sourcing projects in the country. However, the REE mining areas are very remote and controlled by military forces, so finding credible entry points for meaningful collaboration remains a challenge.

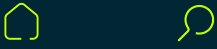
## Stakeholder Engagement

- Dialogue with our direct suppliers of magnets and parts
- Participation in the raw material working group of the VDA
- Engagement with Chinese counterparts in a Sino-German pilot project on the REE supply chain (BGR-CCCMC project)
- Dialogue with NGOs and CSOs on REE mining in Myanmar

## Outlook 2025

We plan to

- maintain bilateral engagement with the Chinese REE sector to gain more insight into their supply chain
- intensify dialogue with our direct suppliers to strengthen sustainability requirements for tier-2 and tier-3 suppliers
- continue evaluations to increase the share of recycled materials and to reduce the overall use of HREE in EV magnets
- continue to evaluate potential for meaningful engagement in Myanmar



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In 2024, we also continued a German-Chinese pilot project for sustainability requirements in the Chinese rare earths supply chain, led by the German Federal Institute for Geosciences and Natural Resources (BGR) and the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC). The project aims to promote exchange between German and Chinese industry actors, building a common understanding of existing sustainability risks in the supply chain, and to increase transparency. The first phase of the pilot was completed in 2024, with valuable results achieved and trust built through direct exchange. Despite the progress made, the project will not enter a second phase, mainly due to insufficient alignment on realistic goals and differing expectations.

Instead, the Volkswagen Group aims to build on its direct engagement and will intensify its bilateral and trilateral dialogue in the country through the CCCMC and tier-2 and tier-3 suppliers. As a first initiative, Volkswagen representatives visited a metallization and separation facility and three magnet production sites in Inner Mongolia and Shandong. The project group engaged directly with the CCCMC and local Chinese stakeholders to discuss the need for greater transparency in the supply chains of REE and the opportunity to drive sustainable sourcing practices through joint audits and programs.

### Alternatives to primary REE

Through the Critical Raw Materials Act (CRMA), the EU aims to cover at least 15% of the annual consumption of strategic raw materials (including REE) through recycling by 2030. This is an ambitious goal and there is a long way to go, as to date, the recycling rate of rare earths is almost negligible and remains technically challenging. Several industry actors are currently advancing their technology to reuse scrap and so-called "swarf" (waste from cutting blocks of new permanent magnets into shapes), so that recycling processes are in place once enough EVs and wind turbines reach their end of life and can be reused.

In the reporting year, the Volkswagen Group engaged in various pilot projects with research institutes, magnet manufacturers and recycling facilities to evaluate the dismantling and recycling of permanent magnets from assembled rotors for reuse. To meet the market demand for EVs more sustainably, our R&D departments are also continuously looking into ways to reduce the amount of heavy REE (HREE) used in permanent magnets. HREE are mostly associated with Myanmar, where the regime is characterized by conflict.



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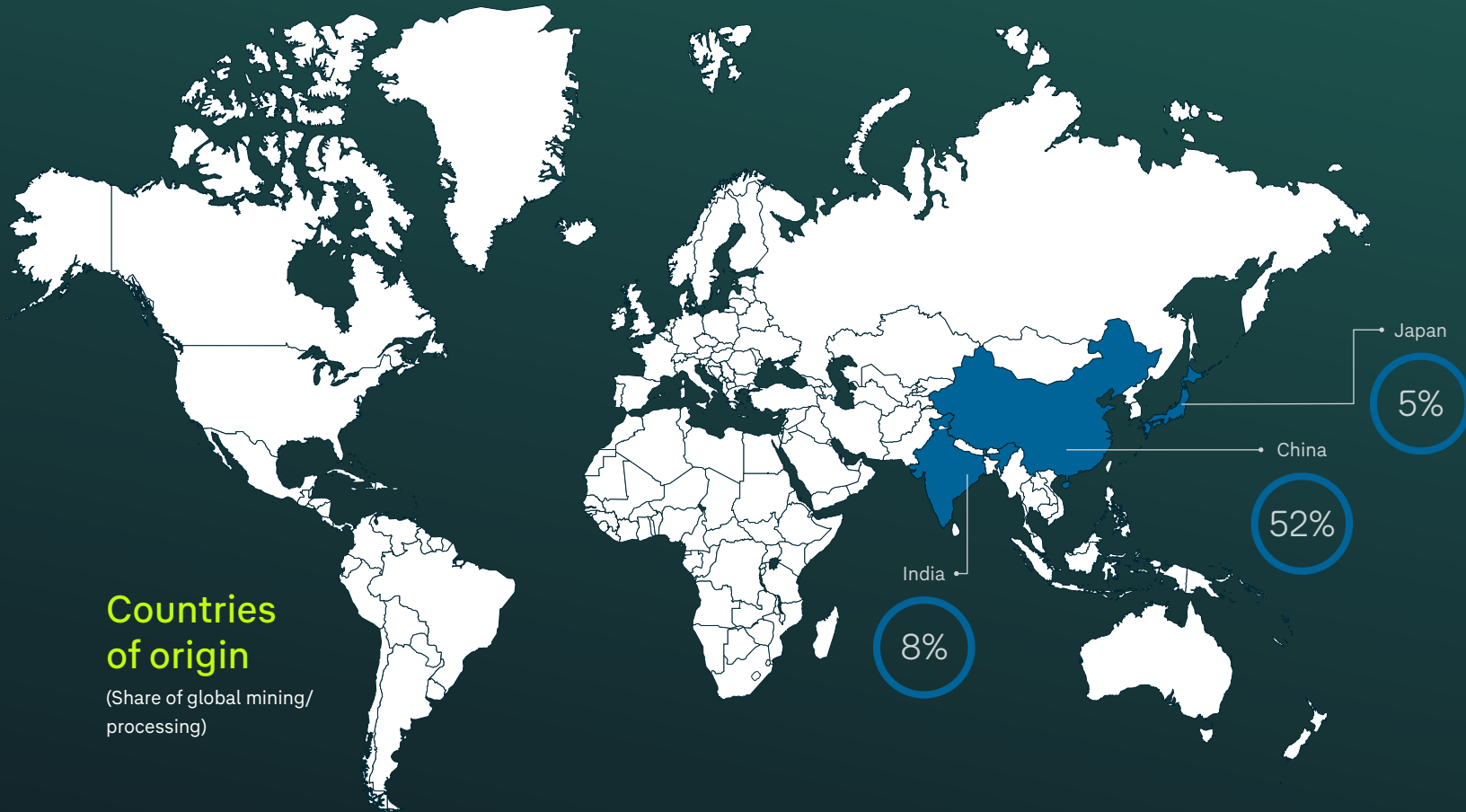
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# → Steel

Steel is made from the combination of iron and carbon in the classic blast furnace method and is one of the world's most utilized materials. It is used in buildings, infrastructure, transportation vehicles, tools, machines and much more. Many other elements may be added for different grades of steel.





● Top 3 mining countries Sources: USGS, 2024 estimates.

## Key material-specific risks



### Environment

-  — Air pollution
-  — Water pollution and consumption
-  — Handling and disposal of waste
-  — Soil pollution and land degradation
-  — Loss of biodiversity

### Human Rights

-  — Forced or compulsory labor
-  — Health and safety

### Community Life

-  — Protection of the rights of indigenous peoples
-  — Causing harmful environmental change





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## Steel in our Supply Chain

Although steel is partially being replaced by aluminum for lightweighting, it remains a key material in vehicle construction due to its excellent mechanical properties. It is used in body structure, panels, doors, powertrains, suspension, steering and braking systems and is also the material of choice for generators, electric engines and structural components of electric vehicles. Advanced High Strength Steels (AHSS) are being used to develop lighter vehicles.

As we aim to source locally, close to the respective production sites, the majority of steel is sourced from suppliers in Europe.

## Risk Assessment

Iron ore mining and steel production are mostly mechanized large-scale activities, often taking place in integrated steel mills. This means that several production steps such as the blast furnace process, steelmaking, rolling and galvanizing processes are combined at the same site. Iron ores are typically mined at the surface in open pits, but large underground mines also exist. The fact that approximately 50% of iron ore is found in forested areas means that there is an increased risk to biodiversity and the environment. The production of steel in blast furnaces is highly energy intensive. Beyond CO<sub>2</sub> emissions, air pollution remains a risk. In addition, a significant amount of water is used for cooling and other purposes.

Since a large proportion of the risks for steel lie in the upstream supply chain, the Volkswagen Group is continuing to work on increasing supply chain transparency. This deepens

### KEY APPLICATION

#### — Body sheets

our understanding of our specific supply chains and the risks they entail. The focus is particularly on the primary materials coking coal and iron ore. One of the systemic and salient risk areas identified by the Volkswagen Group is therefore the use of natural resources and the associated negative environmental impacts. Another risk area is ensuring occupational health and safety, particularly in mining operations.

## Risk Mitigation

In the reporting year, we continued our ongoing dialogue with our steel suppliers in order to leverage their influence in defining risk mitigation measures along the steel supply chain. Volkswagen has piloted a supply chain questionnaire for new sourcing, with a focus on creating transparency regarding the sources of coal and iron ore. This will help us to define further risk mitigation measures.

As for other materials, the Volkswagen Group aims to develop parameters for a sustainability specification sheet for steel to be used in sourcings for our own pressing plants. However, though industry standards covering a range of ESG issues are being developed, there is not yet enough certified material on the market to make this a prerequisite for sourcing.

The Volkswagen Group is continuously evaluating the options for joining specific industry initiatives for steel and suitable certification opportunities.

## Decarbonization

Steel is one of the Volkswagen Group's most important production materials and one of the focus materials for the decarbonization of its supply chain. Therefore, the Group is aiming to increase the share of low-carbon green steel used in its vehicles and is extending its partnerships with suppliers of steel produced with hydrogen and renewable energy.

## Stakeholder Engagement

- Dialogue with our direct suppliers about transparency and risk mitigation measures in their upstream supply chains for coal and iron ore
- Evaluating options for joining specific industry initiatives for steel

## Outlook 2025

We plan to

- expand the use of the supply chain questionnaire for additional steel sourcings
- continue developing appropriate sustainability specification parameters
- further engage with our steel suppliers and relevant industry initiatives

Although the projects are not covered by the RMDDMS, the initiatives have a positive impact on the steel supply chain as steel produced with renewable energies contributes less to adverse environmental and social impacts in mining and processing countries.



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The implementation of due diligence obligations in the procurement of raw materials is an ongoing and progressive endeavor, and we look forward to continuing our efforts across the Volkswagen Group and our global supply chains in 2025. Our focus will be on the following topics.

### Implementing regulatory requirements

With some provisions of the EU Battery Regulation and the EU Deforestation Regulation taking effect in 2025, many of our due diligence activities related to raw materials used in batteries as well as natural rubber will become legally binding for the first time. We are therefore working intensively to translate the requirements into our systems and implement them for the affected components.

Our aim is to introduce measures throughout our supply chains that are both targeted and practicable. This is particularly important for measures at the upstream levels of our supply chains, where we do not have a direct business relationship and limited influence. New laws have imposed increasingly stringent documentation and reporting requirements, which we also plan to strengthen within our management system (RMDDMS) in 2025.

### Aiming for supply chain transparency

In general, our suppliers share our goals for protecting human rights and the environment in the supply chain. However, many of the specific requirements we impose on them are new to them and require explanation. One example is supply chain transparency. While in some sectors like forestry transparent supply chains have been an expectation for quite some time, this requirement is unfamiliar to the majority of automotive suppliers. This needs to change, as risk analysis and mitigation measures can only be implemented more effectively in our upstream supply chain if we have a clear picture of the actors and the supply landscape.

We will continue to engage closely with our suppliers and sub-suppliers and promote the benefits of a transparent supply chain.

### Joining forces in industry initiatives

In 2025, we will continue to work with industry associations to further harmonize risk analysis and mitigation measures. Especially in the upstream supply chains, it is difficult to expect companies to complete a large number of audits and questionnaires, some of which are identical. This only increases bureaucracy without adding value.

Therefore, our focus will continue to be on the cross-recognition of standards and audits. We plan to support the development and rollout of tools for the battery supply chain that can be accepted and implemented by the entire industry, specifically the Drive Sustainability's Battery SAQ and the RMI's updated ESG audits.

### Positive impact

As one of the world's largest automotive manufacturers, the Volkswagen Group has a great responsibility toward its partners, stakeholders and society. In 2025 and beyond, we will continue to take our responsibility for sustainable raw material sourcing very seriously and to learn as we go. Our goal remains to achieve measurable positive results for human rights and the environment, step by step and year by year.

We provide an in-depth outlook for 2025 for our 18 priority raw materials in → **Section 04** of this report.







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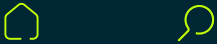
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## Annex I: List of Abbreviations

<b>3TG</b>	tin, tantalum, tungsten and gold
<b>AHSS</b>	Advanced High Strength Steels
<b>AI</b>	artificial intelligence
<b>ARM</b>	Alliance for Responsible Mining
<b>ASI</b>	Aluminium Stewardship Initiative
<b>ASM</b>	artisanal and small-scale mining
<b>BGR</b>	Bundesanstalt für Geowissenschaften und Rohstoffe (German Federal Institute for Geosciences and Natural Resources (BGR))
<b>BSAQ</b>	Battery Self Assessment Questionnaire
<b>C4D</b>	Cobalt for Development
<b>CAHRAs</b>	Conflict Affected and High Risk Areas
<b>CAP</b>	corrective action plan
<b>CASCADE</b>	Committed Actions for Smallholders Capacity Development
<b>CCCMC</b>	China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters
<b>CMRT</b>	Conflict Minerals Reporting Template
<b>CMSI</b>	Consolidated Mining Standard Initiative
<b>CoC BP</b>	Code of Conduct for Business Partners
<b>CoC Standard</b>	Chain of Custody Standard
<b>CRMA</b>	Critical Raw Materials Act
<b>CSO</b>	civil society organization
<b>CSR</b>	Corporate Social Responsibility
<b>DERA</b>	German Raw Materials Agency
<b>DLE</b>	Direct Lithium Extraction
<b>DRC</b>	Democratic Republic of the Congo

<b>EU</b>	European Union
<b>EUBR</b>	EU Regulation concerning batteries and waste batteries (EU Battery Regulation)
<b>EUDR</b>	EU Deforestation Regulation
<b>ESG</b>	environmental, social and governance
<b>ESRS</b>	European Sustainability Reporting Standards
<b>EV</b>	electric vehicle
<b>FAO</b>	Food and Agriculture Organization of the United Nations
<b>FAS USDA</b>	Foreign Agricultural Service United States Department of Agriculture
<b>FMCG</b>	Fast Moving Consumer Goods
<b>FPIC</b>	Free, Prior, and Informed Consent
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)
<b>GPSNR</b>	Global Platform for Sustainable Natural Rubber
<b>GWh</b>	gigawatt hours
<b>HREE</b>	heavy rare earth elements
<b>ICMM</b>	International Council on Minerals and Metals
<b>ILO</b>	International Labour Organization
<b>IPA</b>	International Platinum Group Metals Association
<b>IRMA</b>	Initiative for Responsible Mining Assurance
<b>KPI</b>	key performance indicator
<b>LCD</b>	liquid-crystal display
<b>LkSG</b>	Supply Chain Due Diligence Act
<b>LPPM</b>	London Platinum and Palladium Market
<b>LWG</b>	Leather Working Group



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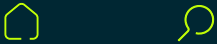
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MAC	Mining Association of Canada
MDA	Mineworkers Development Agency
NAP	National Action Plan
NGO	non-governmental organization
NMC	Nickel-Manganese-Cobalt
OECD	Organisation for Economic Co-operation and Development
OECD-FAO	Food and Agriculture Organization
OEM	Original Equipment Manufacturer
PGM	platinum group metals
PPE	personal protective equipment
REE	rare earth elements
ReSC System	Responsible Supply Chain System

RMAP	Responsible Minerals Assurance Process
RMDDMS	Raw Materials Due Diligence Management System
RMI	Responsible Minerals Initiative
RRA	Risk Readiness Assessment
SAQ	Sustainability Assessment Questionnaire
UFLPA	Uyghur Forced Labor Prevention Act
UN	United Nations
USGS	United States Geological Survey
VDA	Verband der Automobilindustrie (German Association of the Automotive Industry (VDA))
WGC	World Gold Council
WWF	World Wide Fund for Nature



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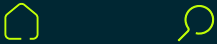
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Aluminium Stewardship Initiative (ASI)
CASCADE project
Cobalt for Development (C4D)
Drive Sustainability
German Automotive Sector Dialogue
Global Battery Alliance (GBA)
Global Platform for Sustainable Natural Rubber (GPSNR)
Initiative for Responsible Mining Assurance (IRMA)
International Platinum Group Metals Association (IPA)
Leather Working Group (LWG)

Marikana Coalition
Raw Material Working Group of the Verband der Automobilindustrie (VDA)
Responsible Lithium Partnership
Responsible Mica Initiative
Responsible Minerals Initiative (RMI)
Responsible Supply Chain Initiative (RSCI)
Swedish Leadership for Sustainable Development
Teknikföretagen (Association of Swedish Engineering Industries)
The Copper Mark



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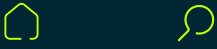
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Annex III: List of 3TG Smelters

Metal	Smelter name	RMI ID
Gold	8853 S.p.A.	CID003666
Gold	ABC Refinery Pty Ltd.	CID003463
Gold	Abington Reldan Metals, LLC	CID003641
Gold	Advanced Chemical Company	CID003557
Gold	African Gold Refinery	CID003500
Gold	Agosi AG	CID004010
Gold	Aida Chemical Industries Co., Ltd.	CID002920
Gold	Al Etihad Gold Refinery DMCC	CID002762
Gold	Albino Mountinho Lda.	CID002030
Gold	Alexy Metals	CID002779
Gold	Almalyk Mining and Metallurgical Complex (AMMC)	CID002587
Gold	AngloGold Ashanti Corrego do Sitio Mineracao	CID001980
Gold	Argor-Heraeus S.A.	CID000058
Gold	Asahi Pretec Corp.	CID002760
Gold	Asahi Refining Canada Ltd.	CID002606
Gold	Asahi Refining USA Inc.	CID001534
Gold	Asaka Riken Co., Ltd.	CID000924
Gold	Atasay Kuyumculuk Sanayi Ve Ticaret A.S.	CID000185
Gold	Attero Recycling Pvt Ltd	CID002919
Gold	AU Traders and Refiners	CID000855
Gold	Augmont Enterprises Private Limited	CID000801
Gold	Aurubis AG	CID001947
Gold	Bangalore Refinery	CID001916
Gold	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	CID002224
Gold	Boliden Ronnskar	CID001909
Gold	C. Hafner GmbH + Co. KG	CID000343
Gold	Caridad	CID000671

Metal	Smelter name	RMI ID
Gold	CCR Refinery - Glencore Canada Corporation	CID000651
Gold	Cendres + Metaux S.A.	CID002312
Gold	CGR Metalloys Pvt Ltd.	CID001736
Gold	Chimet S.p.A.	CID002750
Gold	Chugai Mining	CID001810
Gold	Coimpa Industrial LTDA	CID002243
Gold	Daye Non-Ferrous Metals Mining Ltd.	CID000773
Gold	Degussa Sonne / Mond Goldhandel GmbH	CID000522
Gold	Dijllah Gold Refinery FZC	CID000767
Gold	Dongwu Gold Group	CID001147
Gold	Dowa	CID001149
Gold	DSC (Do Sung Corporation)	CID002525
Gold	Eco-System Recycling Co., Ltd. East Plant	CID002527
Gold	Eco-System Recycling Co., Ltd. North Plant	CID001058
Gold	Eco-System Recycling Co., Ltd. West Plant	CID001093
Gold	Elite Industech Co., Ltd.	CID001056
Gold	Emerald Jewel Industry India Limited (Unit 1)	CID001362
Gold	Emerald Jewel Industry India Limited (Unit 2)	CID001619
Gold	Emerald Jewel Industry India Limited (Unit 3)	CID001622
Gold	Emerald Jewel Industry India Limited (Unit 4)	CID000197
Gold	Emirates Gold DMCC	CID000707
Gold	Fidelity Printers and Refiners Ltd.	CID002290
Gold	Fujairah Gold FZC	CID002761
Gold	Gasabo Gold Refinery Ltd	CID002867
Gold	GG Refinery Ltd.	CID000711
Gold	GGC Gujrat Gold Centre Pvt. Ltd.	CID000035
Gold	Gold by Gold Colombia	CID002778





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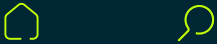
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Metal	Smelter name	RMI ID
Gold	Gold Coast Refinery	CID000694
Gold	Gold Refinery of Zijin Mining Group Co., Ltd.	CID003186
Gold	Great Wall Precious Metals Co., Ltd. of CBPM	CID000176
Gold	Guangdong Jinding Gold Limited	CID000113
Gold	Guoda Safina High-Tech Environmental Refinery Co., Ltd.	CID002893
Gold	Hangzhou Fuchunjiang Smelting Co., Ltd.	CID002852
Gold	Heimerle + Meule GmbH	CID002853
Gold	Heraeus Germany GmbH Co. KG	CID002588
Gold	Heraeus Metals Hong Kong Ltd.	CID002509
Gold	Hunan Chenzhou Mining Co., Ltd.	CID003382
Gold	Hunan Guiyang yinxing Nonferrous Smelting Co., Ltd.	CID003383
Gold	HwaSeong CJ CO., LTD.	CID001397
Gold	Impala Platinum - Platinum Metals Refinery (PMR)	CID002973
Gold	Industrial Refining Company	CID002580
Gold	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	CID002763
Gold	International Precious Metal Refiners	CID000233
Gold	Ishifuku Metal Industry Co., Ltd.	CID002765
Gold	Istanbul Gold Refinery	CID002129
Gold	Italpreziosi	CID002100
Gold	JALAN & Company	CID000807
Gold	Japan Mint	CID001325
Gold	Jiangxi Copper Co., Ltd.	CID000425
Gold	JSC Ekaterinburg Non-Ferrous Metal Processing Plant	CID001119
Gold	JSC Novosibirsk Refinery	CID000019
Gold	JSC Uralelectromed	CID000082
Gold	JX Nippon Mining & Metals Co., Ltd.	CID000401
Gold	K.A. Rasmussen	CID000264
Gold	Kaloti Precious Metals	CID000823
Gold	Kazakhmys Smelting LLC	CID000090
Gold	Kazzinc	CID001193

Metal	Smelter name	RMI ID
Gold	Kennecott Utah Copper LLC	CID001188
Gold	KGHM Polska Miedz Spolka Akcyjna	CID001875
Gold	Kojima Chemicals Co., Ltd.	CID000937
Gold	Korea Zinc Co., Ltd.	CID003424
Gold	Kundan Care Products Ltd.	CID003425
Gold	Kyrgyzaltyn JSC	CID001798
Gold	Kyshtym Copper-Electrolytic Plant ZAO	CID000981
Gold	L'azurde Company For Jewelry	CID001938
Gold	L'Orfebvre S.A.	CID001259
Gold	Lingbao Gold Co., Ltd.	CID000359
Gold	Lingbao Jinyuan Tonghui Refinery Co., Ltd.	CID002615
Gold	LS MnM Inc.	CID000957
Gold	LT Metal Ltd.	CID000956
Gold	Luoyang Zijin Yinhui Gold Refinery Co., Ltd.	CID000689
Gold	Marsam Metals	CID000778
Gold	Materion	CID001078
Gold	Matsuda Sangyo Co., Ltd.	CID001955
Gold	MD Overseas	CID002605
Gold	Metal Concentrators SA (Pty) Ltd.	CID001562
Gold	Metallix Refining Inc.	CID001555
Gold	Metalor Technologies (Hong Kong) Ltd.	CID002918
Gold	Metalor Technologies (Singapore) Pte., Ltd.	CID003189
Gold	Metalor Technologies (Suzhou) Ltd.	CID001029
Gold	Metalor Technologies S.A.	CID003153
Gold	Metalor USA Refining Corporation	CID002857
Gold	Metalurgica Met-Mex Penoles S.A. De C.V.	CID000180
Gold	Minera Titán del Perú SRL (MTP) - Belen Plant	CID002582
Gold	Mitsubishi Materials Corporation	CID001161
Gold	Mitsui Mining and Smelting Co., Ltd.	CID002282
Gold	MKS PAMP SA	CID000128



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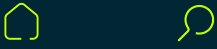
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Gold	MMTC-PAMP India Pvt., Ltd.	CID002511
Gold	Modeltech Sdn Bhd	CID002865
Gold	Morris and Watson	CID000929
Gold	Moscow Special Alloys Processing Plant	CID001204
Gold	Nadir Metal Rafineri San. Ve Tic. A.S.	CID000927
Gold	Navoi Mining and Metallurgical Combinat	CID001326
Gold	NH Recytech Company	CID001386
Gold	Nihon Material Co., Ltd.	CID000493
Gold	NOBLE METAL SERVICES	CID001756
Gold	Ogussa Osterreichische Gold- und Silber-Scheideanstalt GmbH	CID001152
Gold	Ohura Precious Metal Industry Co., Ltd.	CID001032
Gold	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)	CID002567
Gold	Pease & Curren	CID000157
Gold	Penglai Penggang Gold Industry Co., Ltd.	CID001585
Gold	Planta Recuperadora de Metales SpA	CID002850
Gold	Prioksky Plant of Non-Ferrous Metals	CID001512
Gold	PT Aneka Tambang (Persero) Tbk	CID000077
Gold	PX Precinox S.A.	CID001498
Gold	QG Refining, LLC	CID001153
Gold	Rand Refinery (Pty) Ltd.	CID002003
Gold	Refinery of Seemine Gold Co., Ltd.	CID001352
Gold	REMONDIS PMR B.V.	CID000189
Gold	Royal Canadian Mint	CID002516
Gold	SAAMP	CID001761
Gold	Sabin Metal Corp.	CID002314
Gold	Safimet S.p.A	CID003185
Gold	SAFINA A.S.	CID002584
Gold	Sai Refinery	CID003348
Gold	Sam Precious Metals	CID002563

Metal	Smelter name	RMI ID
Gold	Samduck Precious Metals	CID002560
Gold	Samwon Metals Corp.	CID002561
Gold	SEMPSA Joyeria Plateria S.A.	CID002562
Gold	Shandong Gold Smelting Co., Ltd.	CID000103
Gold	Shandong Humon Smelting Co., Ltd.	CID001220
Gold	Shandong Tiancheng Biological Gold Industrial Co., Ltd.	CID000814
Gold	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CID000015
Gold	Shenzhen CuiLu Gold Co., Ltd.	CID001113
Gold	SHENZHEN JINJUNWEI RESOURCE COMPREHENSIVE DEVELOPMENT CO., LTD.	CID001993
Gold	Shenzhen Zhonghenglong Real Industry Co., Ltd.	CID001157
Gold	Shirpur Gold Refinery Ltd.	CID000920
Gold	Sichuan Tianze Precious Metals Co., Ltd.	CID002708
Gold	Singway Technology Co., Ltd.	CID000969
Gold	SOE Shyolkovsky Factory of Secondary Precious Metals	CID001546
Gold	Solar Applied Materials Technology Corp.	CID003487
Gold	Sovereign Metals	CID003324
Gold	State Research Institute Center for Physical Sciences and Technology	CID002872
Gold	Sudan Gold Refinery	CID000041
Gold	Sumitomo Metal Mining Co., Ltd.	CID001236
Gold	SungEel HiMetal Co., Ltd.	CID002515
Gold	Super Dragon Technology Co., Ltd.	CID004755
Gold	T.C.A S.p.A	CID005006
Gold	Tanaka Kikinzoku Kogyo K.K.	CID003488
Gold	TITAN COMPANY LIMITED, JEWELLERY DIVISION	CID003489
Gold	Tokuriki Honten Co., Ltd.	CID003490
Gold	Tongling Nonferrous Metals Group Co., Ltd.	CID004491
Gold	TOO Tau-Ken-Altyn	CID004697
Gold	Torecom	CID004714



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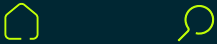
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Metal	Smelter name	RMI ID
Gold	Umicore Precious Metals Thailand	CID004506
Gold	Umicore S.A. Business Unit Precious Metals Refining	CID003690
Gold	United Precious Metal Refining, Inc.	CID004435
Gold	Valcambi S.A.	CID003548
Gold	WEEEREFINING	CID003461
Gold	Western Australian Mint (T/a The Perth Mint)	CID002863
Gold	WIELAND Edelmetalle GmbH	CID005014
Gold	Yamakin Co., Ltd.	CID003497
Gold	Yokohama Metal Co., Ltd.	CID003575
Gold	Yunnan Copper Industry Co., Ltd.	CID003663
Gold	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CID003615
Tantalum	5D Production OU	CID001175
Tantalum	AMG Brasil	CID001076
Tantalum	D Block Metals, LLC	CID002707
Tantalum	F&X Electro-Materials Ltd.	CID002842
Tantalum	FIR Metals & Resource Ltd.	CID000460
Tantalum	Global Advanced Metals Aizu	CID000291
Tantalum	Global Advanced Metals Boyertown	CID002505
Tantalum	Guangdong Rising Rare Metals-EO Materials Ltd.	CID002492
Tantalum	Hengyang King Xing Lifeng New Materials Co., Ltd.	CID000616
Tantalum	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.	CID000914
Tantalum	Jiangxi Tuohong New Raw Material	CID000917
Tantalum	JiuJiang JinXin Nonferrous Metals Co., Ltd.	CID001522
Tantalum	Jiujiang Tanbre Co., Ltd.	CID002506
Tantalum	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.	CID002512
Tantalum	KEMET de Mexico	CID001277
Tantalum	Materion Newton Inc.	CID001200
Tantalum	Metallurgical Products India Pvt., Ltd.	CID002550
Tantalum	Mineracao Taboca S.A.	CID002545
Tantalum	Mitsui Mining and Smelting Co., Ltd.	CID001163

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Tantalum	Ningxia Orient Tantalum Industry Co., Ltd.	CID002549
Tantalum	NPM Silmet AS	CID002558
Tantalum	PowerX Ltd.	CID001192
Tantalum	QuantumClean	CID001869
Tantalum	Resind Industria e Comercio Ltda.	CID001969
Tantalum	RFH Yancheng Jinye New Material Technology Co., Ltd.	CID002539
Tantalum	Solikamsk Magnesium Works OAO	CID001769
Tantalum	Taki Chemical Co., Ltd.	CID002544
Tantalum	TANIOBIS Co., Ltd.	CID002504
Tantalum	TANIOBIS GmbH	CID001891
Tantalum	TANIOBIS Japan Co., Ltd.	CID002557
Tantalum	TANIOBIS Smelting GmbH & Co. KG	CID002548
Tantalum	Telex Metals	CID001508
Tantalum	Ulba Metallurgical Plant JSC	CID004054
Tantalum	XIMEI RESOURCES (GUANGDONG) LIMITED	CID003583
Tantalum	Yanling Jincheng Tantalum & Niobium Co., Ltd.	CID003926
Tin	Alpha Assembly Solutions Inc	CID003582
Tin	An Vinh Joint Stock Mineral Processing Company	CID004065
Tin	Aurubis Beerse	CID002703
Tin	Aurubis Berango	CID002574
Tin	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.	CID002572
Tin	Chifeng Dajingzi Tin Industry Co., Ltd.	CID002573
Tin	China Tin Group Co., Ltd.	CID002015
Tin	CRM Fundicao De Metais E Comercio De Equipamentos Eletronicos Do Brasil Ltda	CID003325
Tin	CRM Synergies	CID000292
Tin	Dongguan CiEXPO Environmental Engineering Co., Ltd.	CID001142
Tin	Dowa	CID001314
Tin	Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint Stock Company	CID001898



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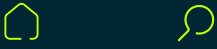
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Metal	Smelter name	RMI ID
Tin	EM Vinto	CID001539
Tin	Estanho de Rondonia S.A.	CID002774
Tin	Fabrica Auricchio Industria e Comercio Ltda.	CID003387
Tin	Fenix Metals	CID001305
Tin	Gejiu City Fuxiang Industry and Trade Co., Ltd.	CID000468
Tin	Gejiu Kai Meng Industry and Trade LLC	CID002517
Tin	Gejiu Non-Ferrous Metal Processing Co., Ltd.	CID001182
Tin	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CID003208
Tin	Gejiu Zili Mining And Metallurgy Co., Ltd.	CID001105
Tin	Global Advanced Metals Greenbushes Pty Ltd.	CID002858
Tin	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.	CID001191
Tin	HuiChang Hill Tin Industry Co., Ltd.	CID000402
Tin	Jiangxi New Nanshan Technology Ltd.	CID001477
Tin	Longnan Chuangyue Environmental Protection Technology Development Co., Ltd	CID001482
Tin	Luna Smelter, Ltd.	CID002776
Tin	Ma'anshan Weitai Tin Co., Ltd.	CID000313
Tin	Magnu's Minerais Metais e Ligas Ltda.	CID001453
Tin	Malaysia Smelting Corporation (MSC)	CID002593
Tin	Malaysia Smelting Corporation Berhad (Port Klang)	CID002503
Tin	Melt Metais e Ligas S.A.	CID002696
Tin	Metallic Resources, Inc.	CID001458
Tin	Mineracao Taboca S.A.	CID003409
Tin	Mining Minerals Resources SARL	CID001070
Tin	Minsur	CID000555
Tin	Mitsubishi Materials Corporation	CID000942
Tin	Modeltech Sdn Bhd	CID000228
Tin	Nghe Tinh Non-Ferrous Metals Joint Stock Company	CID000538
Tin	Novosibirsk Tin Combine	CID002844
Tin	O.M. Manufacturing (Thailand) Co., Ltd.	CID003190

Metal	Smelter name	RMI ID
Tin	O.M. Manufacturing Philippines, Inc.	CID003116
Tin	Operaciones Metalurgicas S.A.	CID001231
Tin	Pongpipat Company Limited	CID001908
Tin	Precious Minerals and Smelting Limited	CID004434
Tin	PT Arsed Indonesia	CID002158
Tin	PT ATD Makmur Mandiri Jaya	CID002180
Tin	PT Bangka Prima Tin	CID003379
Tin	PT Cipta Persada Mulia	CID003410
Tin	PT Mitra Stania Prima	CID003397
Tin	PT Mitra Sukses Globalindo	CID003356
Tin	PT Premium Tin Indonesia	CID002706
Tin	PT Prima Timah Utama	CID002468
Tin	PT Putera Sarana Shakti (PT PSS)	CID002500
Tin	PT Rajehan Ariq	CID000448
Tin	PT Timah Tbk Kundur	CID002756
Tin	PT Timah Tbk Mentok	CID002036
Tin	Resind Industria e Comercio Ltda.	CID001173
Tin	RIKAYAA GREENTECH PRIVATE LIMITED	CID000438
Tin	Rui Da Hung	CID001337
Tin	Super Ligas	CID002773
Tin	Takehara PVD Materials Plant / PVD Materials Division of MITSUI MINING & SMELTING CO., LTD.	CID004692
Tin	Thaisarco	CID004754
Tin	Tin Smelting Branch of Yunnan Tin Co., Ltd.	CID004403
Tin	Tin Technology & Refining	CID004796
Tin	Tuyen Quang Non-Ferrous Metals Joint Stock Company	CID004724
Tin	VQB Mineral and Trading Group JSC	CID005067
Tin	White Solder Metalurgia e Mineracao Ltda.	CID003524
Tin	Woodcross Smelting Company Limited	CID003486
Tin	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CID003449





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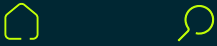
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Metal	Smelter name	RMI ID
Tin	Yunnan Yunfan Non-ferrous Metals Co., Ltd.	CID003868
Tungsten	A.L.M.T. Corp.	CID003468
Tungsten	ACL Metais Eireli	CID003978
Tungsten	Albasteel Industria e Comercio de Ligas Para Fundicao Ltd.	CID004056
Tungsten	Artek LLC	CID004397
Tungsten	Asia Tungsten Products Vietnam Ltd.	CID003609
Tungsten	China Molybdenum Tungsten Co., Ltd.	CID003662
Tungsten	Chongyi Zhangyuan Tungsten Co., Ltd.	CID002502
Tungsten	CNMC (Guangxi) PGMA Co., Ltd.	CID002543
Tungsten	Cronimet Brasil Ltda	CID000105
Tungsten	DONGKUK INDUSTRIES CO., LTD.	CID000966
Tungsten	Fujian Xinlu Tungsten Co., Ltd.	CID000568
Tungsten	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CID002589
Tungsten	Ganzhou Seadragon W & Mo Co., Ltd.	CID003407
Tungsten	Global Tungsten & Powders LLC	CID002724
Tungsten	Guangdong Xianglu Tungsten Co., Ltd.	CID003408
Tungsten	H.C. Starck Tungsten GmbH	CID003416
Tungsten	HANNAE FOR T Co., Ltd.	CID002649
Tungsten	Hubei Green Tungsten Co., Ltd.	CID002845
Tungsten	Hunan Jintai New Material Co., Ltd.	CID002827
Tungsten	Hunan Shizhuyuan Nonferrous Metals Co., Ltd. Chenzhou Tungsten Products Branch	CID000004
Tungsten	Hydrometallurg, JSC	CID000825
Tungsten	Japan New Metals Co., Ltd.	CID002541
Tungsten	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	CID002542
Tungsten	Jiangxi Gan Bei Tungsten Co., Ltd.	CID000218
Tungsten	Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.	CID002317
Tungsten	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	CID002513
Tungsten	Jiangxi Xinsheng Tungsten Industry Co., Ltd.	CID002641
Tungsten	Jiangxi Yaosheng Tungsten Co., Ltd.	CID000281

Metal	Smelter name	RMI ID
Tungsten	JSC "Kirovgrad Hard Alloys Plant"	CID000258
Tungsten	Kenec Mining Corporation Vietnam	CID000769
Tungsten	Kennametal Fallon	CID002316
Tungsten	Kennametal Huntsville	CID002319
Tungsten	Lianyou Metals Co., Ltd.	CID002320
Tungsten	Lianyou Resources Co., Ltd.	CID002313
Tungsten	LLC Vostok	CID002315
Tungsten	MALAMET SMELTING SDN. BHD.	CID002318
Tungsten	Malipo Haiyu Tungsten Co., Ltd.	CID002321
Tungsten	Masan High-Tech Materials	CID002494
Tungsten	Moliren Ltd.	CID003417
Tungsten	Nam Viet Cromit Joint Stock Company	CID002082
Tungsten	Niagara Refining LLC	CID002551
Tungsten	NPP Tyazhmetprom LLC	CID003427
Tungsten	OOO "Technolom" 1	CID002833
Tungsten	OOO "Technolom" 2	CID002044
Tungsten	Philippine Bonway Manufacturing Industrial Corporation	CID003993
Tungsten	Philippine Carreytech Metal Corp.	CID004034
Tungsten	Philippine Chuangxin Industrial Co., Inc.	CID004430
Tungsten	Shinwon Tungsten (Fujian Shanghang) Co., Ltd.	CID003553
Tungsten	TANIOBIS Smelting GmbH & Co. KG	CID003612
Tungsten	Tungsten Vietnam Joint Stock Company	CID004060
Tungsten	Unecha Refractory metals plant	CID004619
Tungsten	Wolfram Bergbau und Hutten AG	CID004797
Tungsten	Xiamen Tungsten (H.C.) Co., Ltd.	CID004438
Tungsten	Xiamen Tungsten Co., Ltd.	CID003643
Tungsten	YUDU ANSHENG TUNGSTEN CO., LTD.	CID003614



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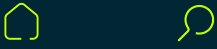
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Annex IV: List of 3TG Countries and territories of origin

Andorra	Chile	Germany	Lithuania	Papua New Guinea	Switzerland
Angola	China	Ghana	Luxembourg	Peru	Taiwan
Argentina	Colombia	Guatemala	Madagascar	Philippines	Tajikistan
Armenia	Congo	Guinea	Malaysia	Poland	Tanzania
Australia	Cyprus	Guyana	Mali	Portugal	Thailand
Austria	Democratic Republic of the Congo	Honduras	Mauritania	Russian Federation	Turkey
Azerbaijan	Djibouti	Hong Kong	Mexico	Rwanda	Uganda
Belarus	Dominica	Hungary	Mongolia	Saudi Arabia	United Arab Emirates
Belgium	Dominican Republic	India	Morocco	Senegal	United Kingdom
Benin	Ecuador	Indonesia	Mozambique	Serbia	United States of America
Bermuda	Egypt	Ireland	Myanmar	Sierra Leone	Uruguay
Bolivia	El Salvador	Israel	Namibia	Singapore	Uzbekistan
Botswana	Eritrea	Italy	Netherlands	Slovakia	Vietnam
Brazil	Estonia	Japan	New Zealand	Solomon Islands	Zambia
Bulgaria	Ethiopia	Kazakhstan	Nicaragua	South Africa	Zimbabwe
Burkina Faso	Fiji	Kenya	Niger	South Sudan	
Burundi	Finland	Korea	Nigeria	Spain	
Cambodia	France	Kyrgyzstan	Norway	Sudan	
Canada	Georgia	Liberia	Oman	Suriname	
Central African Republic		Liechtenstein	Panama	Sweden	



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The English version of the Responsible Raw Materials Report is binding.

### Your Feedback

In the interests of improving and advancing our commitment to sustainability, we would be delighted to receive your feedback on our Responsible Raw Materials Report 2024. You can send us your views directly online using the email address on the left.

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