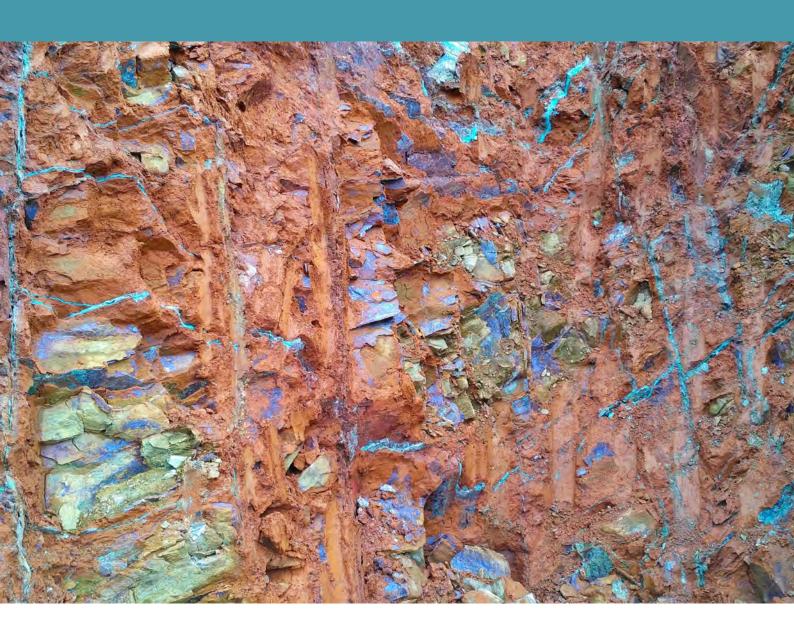
# RESPONSIBLE RAW MATERIALS REPORT 2022

July 2023



## **CONTENTS**

1	FOREWORD	3
2	EXECUTIVE SUMMARY	4
3	OUR RAW MATERIALS DUE DILIGENCE MANAGEMENT SYSTEM	5
	Anchoring our Raw Materials Due Diligence Management System in broader risk management	5
	Our priorities and approach to risk management	5
	RMDDMS developments in 2022	9
	Participation in broader raw materials sustainability initiatives	12
4	OUR RAW MATERIALS DUE DILIGENCE MANAGEMENT SYSTEM IN ACTION Highlights from 2022	<b>13</b>
	RMDDMS implementation in 2022	14
	Raw materials snapshots	17
5	LIMITATIONS	40
6	OUTLOOK FOR 2023	42
	ANNEX I: LIST OF ABBREVIATIONS	43
	ANNEX II: LIST OF INITIATIVES AND ASSOCIATIONS	44
	ANNEX III: LIST OF 3TG SMELTERS	45
	ANNEX IV: LIST OF 3TG COUNTRIES AND TERRITORIES OF ORIGIN	49

### 1 FOREWORD

Dear readers,

As a global player in the automotive sector, we take our corporate responsibility for raw materials sourcing very seriously. In order to identify, assess and address risks in our upstream supply chains, we launched our Raw Materials Due Diligence Management System (RMDDMS) in 2020, which currently covers 16 priority raw materials and their respective supply chains. Our aim is to effectively conduct human rights and environmental risk management.

In this report, you will find all the information about our activities carried out in 2022 within the framework of our RMDDMS as well as the outlook for 2023.

Since March 2022, we have been a member of the Initiative for Responsible Mining Assurance (IRMA), a multi-stakeholder alliance that advocates for higher standards in mining. Through our membership, we hope to gradually implement the IRMA standard in, for example, our own battery supply chains. This is particularly important for us because we believe the most severe human rights and environmental risks in our raw materials supply chains occur often at the mining level.

We also modified our risk management approach in procurement to meet the requirements of the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains (Supply Chain Due Diligence Act, Lieferkettensorgfaltspflichtengesetz – LkSG), which came into force on January 1, 2023. We set up the Responsible Supply Chain system (ReSC system) in 2022 to replace our previous due diligence approach of "prevent, detect, react". To further comply with the Supply Chain Due Diligence Act, we also implemented the Human Rights Focus System (HRFS). The HRFS aims to identify particularly high risks in our supply chains in connection with human rights and the environment, and to manage these appropriately. The HRFS complements our RMDDMS. Our newly appointed human rights officer will independently monitor whether human rights due diligence requirements under the Supply Chain Due Diligence Act are being met.

Sustainability is a significant focus area in our battery supply chain. In 2022, we launched our new battery company, PowerCo SE, and laid the foundations for our own first in-house battery cell factory at the Salzgitter site. PowerCo SE is important for us to achieve vertical integration from raw materials to the battery cell through to recycling. Throughout the year, we met regularly with our battery raw materials suppliers to discuss sustainability issues, including human rights and the environment. We discuss this further on page 14 of this report.

I believe we can only really succeed in respecting human rights and the environment if we engage with all relevant stakeholders as well as with our business partners along our supply chains. Together, we can ensure that our activities have a positive impact on people and the planet and are sustainable in the long run. We remain committed to supporting our suppliers to improve their performance to meet our sustainability requirements.

I am pleased to share the actions we have taken in 2022 and the progress we have achieved towards responsibly sourced raw materials so far. Once again, I would like to thank the team that worked on this report, coordinated by the Volkswagen Group and in direct collaboration with our brands Audi, MAN, Porsche, Scania and Volkswagen Passenger Cars.

We hope the Responsible Raw Materials Report 2022 will inspire different actors to work together to make responsible raw materials sourcing possible.



**Dirk Große-Loheide**Member of the Extended Executive Committee
Group Procurement
Member of the Board

Volkswagen Brand Procurement

### 2 EXECUTIVE SUMMARY

The Volkswagen Group is publishing its third consecutive annual Responsible Raw Materials Report, in line with global normative frameworks including the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Minerals Guidance), the OECD Due Diligence Guidance for Responsible Business Conduct, the OECD-FAO Guidance for Responsible Agricultural Supply Chains, the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights (see our 2022 Sustainability Report for more information, particularly page 105). The first report was published in 2021, an important milestone in meeting our commitment to be a leader in responsible raw materials supply chains.

The Responsible Raw Materials Report 2022 details our approach and activities in our raw-material-specific human rights and environment supply chain due diligence that were implemented in 2022. The report covers 16 high-risk raw materials that we have prioritized for "deep-dive" risk management.

Recognizing the importance of collaboration in our due diligence efforts, we continued to engage in industry initiatives, aiming to increase our leverage and develop industry-wide tools for risk analysis and mitigation. Highlights include joining the Initiative for Responsible Mining Assurance (IRMA) in 2022 and MAN Truck & Bus SE becoming a member of the Copper Mark advisory board. We believe these activities are helping us make progress on our path to transparent and sustainable supply chains and in advancing more responsible mining practices globally.

In anticipation of the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains (known as the Lieferkettensorgfaltspflichtengesetz), which came into effect on January 1, 2023 and which specifies obligations to manage both human rights and environmental risks, we undertook numerous actions to facilitate our supply chain compliance. Importantly, we brought together our risk management components by anchoring our Raw Materials Due Diligence Management System (RMDDMS) into our Responsible Supply Chain system (ReSC system) and further implemented the Human Rights Focus System (HRFS).

The Volkswagen Group continued to prioritize the implementation of our raw materials specification sheets that set out sustainability and responsible sourcing requirements. In 2022, the Volkswagen Group introduced a specification sheet for leather and prepared to roll out specification sheets for mica and aluminum. The specification sheets are a key tool for us to gather information from our supply chain partners regarding risks and their mitigation, and they are a binding requirement in future sourcing.

For the second year in a row, we are pleased to be able to disclose the list of smelters in our 3TG supply chains (see Annex III).

We further engaged with numerous initiatives aimed at enabling responsible sourcing through interventions at mine-site level. In November 2022, through the Cobalt for Development (C4D) initiative, we participated in a trip organized by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), the German international development agency, to one of the project sites in the Democratic Republic of the Congo (DRC). In parallel to this trip, we attended a workshop in 2022 in the DRC organized by Drive Sustainability and CSR Europe. The workshop served as a platform for direct engagement with local miners from the DRC's coppercobalt sector. We also undertook numerous activities through our engagement with the Responsible Lithium Partnership, which focused on a lithium mining region in Chile, by contributing to a hydrological study of the region and presenting its findings to the partnership.

Through our on-the-ground projects with the Responsible Mica Initiative (RMI), we participated in its Community Empowerment programs, which included working with 180 villages in the Jharkhand and Bihar mica belt in India. We also took part in a multistakeholder event in Madagascar in 2022 with the local government and non-governmental organizations (NGOs) to raise awareness about the RMI among local stakeholders as well as the associated risks and relevant standards.

While we continue to face challenges to responsibly source raw materials, such as the lack of transparency in raw materials supply chains and uneven legal requirements across the world regarding sustainability standards, we continue to take steps to increase the effectiveness of our risk management system. While we are pleased with our progress, we know that we need to continue engaging with our suppliers, turn our focus increasingly to risk mitigation, and take steps to more effectively assess whether the actions we have taken are advancing positive impacts for people and environments affected by our raw materials supply chains.

We invite readers to dive into the details of this report and share feedback via email at sustainability@vwgroupsupply.com.

## 3 OUR RAW MATERIALS DUE DILIGENCE MANAGEMENT SYSTEM

As one of the largest automotive manufacturers globally, the Volkswagen Group recognizes its impact on people and the planet. We continue to take proactive steps to try and ensure that our activities and the activities of our suppliers in our supply chains align with leading practice in respecting human rights and the environment. The efforts we make are part of our broader commitment to fulfilling our legal, social and environmental responsibility not only in our own Group, but also in our supply chains.

This Responsible Raw Materials Report 2022 outlines the Volkswagen Group's raw materials due diligence activities in accordance with the normative standards listed in the executive summary (page 4 of this report). The report covers the period between January and December 2022 and provides insights into the scope, approach and implementation of the Volkswagen Group's activities related to due diligence efforts in its priority raw materials.

### ANCHORING OUR RAW MATERIALS DUE DILIGENCE MANAGEMENT SYSTEM IN BROADER RISK MANAGEMENT

To help ensure that our approach is consistent and standardized throughout the Volkswagen Group, we have implemented the Raw Materials Due Diligence Management System (RMDDMS). The system is based on the Volkswagen Group Policy on Sustainable Raw Materials, which sets out our commitment to responsible and transparent business practices throughout our raw materials supply chains.

Our RMDDMS is part of a broader set of management systems that address human rights and environmental risks across the Volkswagen Group. It seeks to align to the OECD Due Diligence Guidance for Responsible Business Conduct and the OECD-FAO Guidance for Responsible Agricultural Supply Chains.

Through the implementation of the RMDDMS, we aim to improve transparency in our supply chain, engage with suppliers and stakeholders to identify and mitigate risks, and prevent and mitigate potential negative impacts on people and planet. While one of the purposes of this report is to outline our RMDDMS, we have provided some high-level information about our broader risk management approach to human rights and the environment in the Volkswagen Group Procurement in our 2022 Sustainability Report.

## OUR PRIORITIES AND APPROACH TO RISK MANAGEMENT

Our supply chains are complex, comprising more than 59,000 suppliers around the world in more than 90 countries and involving thousands of parts made from a wide range of raw materials. It is therefore essential that we prioritize areas of focus in our due diligence efforts. Different supply chains tend to carry varying levels of risk. To address these complexities and the sheer scale of our raw materials supply chains, we developed a methodology to select priority raw materials based on the severity of potential human rights impacts. We were able to monitor risks through:

- Continuous media screening discussed below on page 21 of this report
- · Assessment via industry initiatives, such as Drive Sustainability
- Social and environmental risk analyses with potential new strategic partners (such as the PowerCo SE risk analysis)
- · Reviewing industry reports and studies
- · Reviewing cases from our grievance mechanism
- · Outreach to stakeholders, including affected people and NGOs

We also considered our leverage in raw materials supply chains, and at times prioritized raw materials where we concluded that the risks were less severe but where we had high leverage. In these cases, we saw a clear opportunity to make a positive impact.

The data for our raw materials prioritization was derived from different sources. One key source was the Material Change report, commissioned by Drive Sustainability and the Responsible Minerals Initiative (RMI). Additionally, we evaluated data based on the current and future demand for each material from the Volkswagen Group. The results of this assessment produced a list of 16 priority raw materials in scope for the RMDDMS, which remained the same in 2022 as compared with 2021 and 2020.

<sup>&</sup>lt;sup>1</sup> The RMDDMS was first implemented in 2020.

<sup>&</sup>lt;sup>2</sup> The Volkswagen Group Policy on Sustainable Raw Materials is still in the process of being reviewed and will be updated once the EU Battery Regulation has been finalized.

### How the RMDDMS works







### **VOLKSWAGEN GROUP**



### SENIOR-LEVEL STEERING COMMITTEE



Responsible for ensuring that the RMDDMS is in line with leading practice and making critical decisions regarding the system.



Meets quarterly as the "Group Staff Meeting Sustainability."



### SENIOR MANAGEMENT OF SUSTAINABILITY FROM PROCUREMENT

Represent all relevant brands and regions of the Volkswagen Group



**Chair:** Head of Global Supplier Risk and Sustainability Management of Volkswagen Group Procurement, Audi, Porsche, MAN and Scania



**Members include:** Senior Management of Sustainability from Procurement across all relevant brands and regions of the Volkswagen Group

### **OVERSEE**

### **RMDDMS**

Gathering relevant data from suppliers

Engaging with suppliers and industry

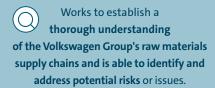
Analyzing data and seeking improvements



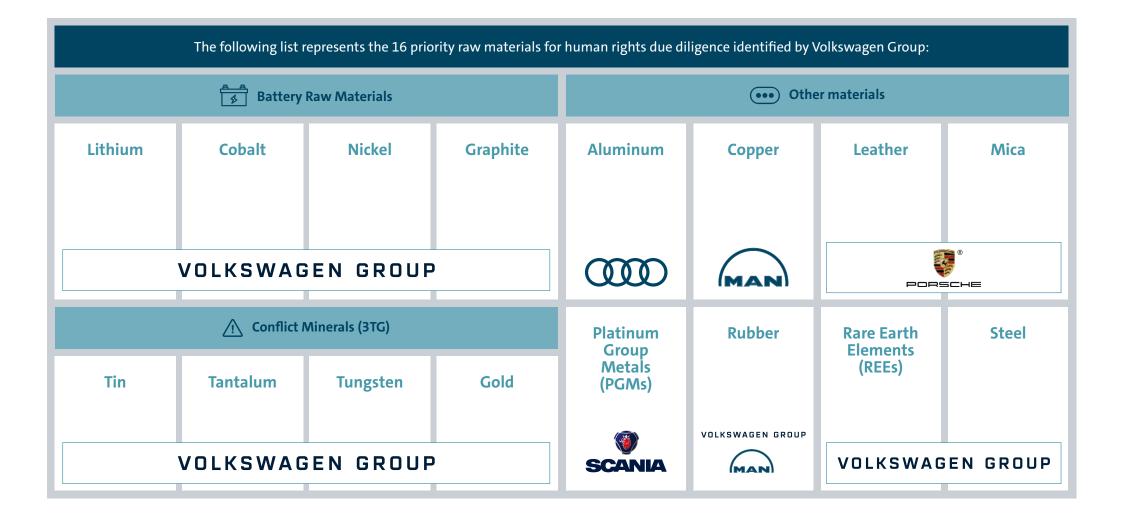
**FEEDS INTO** 



### **WORKING GROUP**



- **16 representatives or "brand leads"** assigned to each priority raw material
- Responsible for implementing due diligence activities for the given material(s)
- Develop in-depth expertise
- Lead in supplier engagement for their material
- Facilitates collaboration and communication across the different departments and brands within the Volkswagen Group, promoting a culture of responsible and sustainable business practices
- Meet monthly to coordinate RMDDMS activities across the materials.
- Brand leads report on progress, challenges, and potential risks associated with their assigned raw material(s)
- Exchange on effective practices and discuss strategies for further improvement.



## HUMAN RIGHTS AND ENVIRONMENTAL RISKS DETERMINED BY VOLKSWAGEN GROUP TO BE IN SCOPE FOR THE WORK OF THE RAW MATERIALS DUE DILIGENCE MANAGEMENT SYSTEM ARE:



Child labor



Modern slavery



Systematic or widespread human rights abuses associated with the extraction, transportation and trading of raw material



Human rights abuses committed by public or private security forces



Direct or indirect support to non-state armed groups or public or private security forces



Risks to workers' occupational health and safety (OHS)



Adverse environmental impacts
(including the use of hazardous
materials and chemicals; radioactive
materials; potential of acid
discharge to the environment;
incidences of overlap with areas of
conservation importance)



Infringement of labor rights



Discrimination and harassment, including against vulnerable groups



Threats to indigenous people and communities (including land grabbing without compensation)

### **RMDDMS DEVELOPMENTS IN 2022**

As part of our RMDDMS, we strive to continually improve our due diligence efforts. In 2022, we implemented several measures that we believe strengthen the system.

### ANCHORING THE RMDDMS INTO THE RESC SYSTEM

In 2022, we created an integrated risk management system by anchoring the RMDDMS into the Volkswagen Group Responsible Supply Chain system (ReSC system see graphic on page 10). This system is the main management approach used by the Volkswagen Group in procurement and is aligned for compliance with the German Act on Corporate Due Diligence Obligations for the Prevention of Human Rights Violations in Supply Chains (Supply Chain Due Diligence Act, Lieferkettensorgfaltspflichtengesetz)

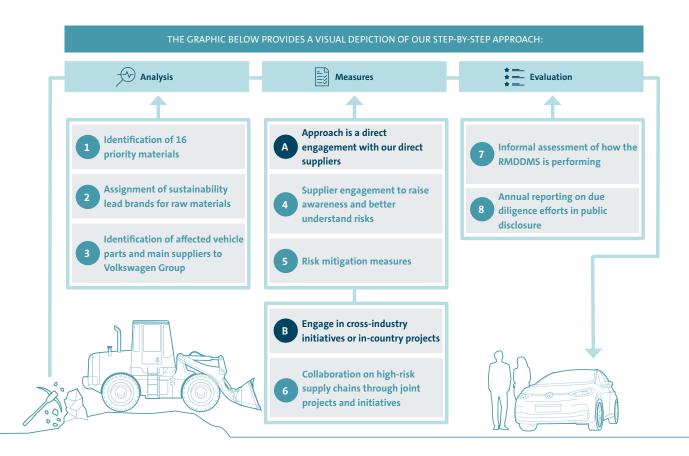
The ReSC system takes a new approach that aims to prevent or minimize human rights and environmental risks along the Volkswagen Group's supply chains based on a systematic risk analysis. The analysis is based on the suppliers' business models and takes account of internal and external data on human rights and environmental risks. The ReSC system is designed to help mitigate risks from occurring and to continually improve suppliers' sustainability performance. More information about the ReSC system can be found in our 2022 Sustainability Report (pages 107 and 109).

The sustainability performance of every relevant supplier is assessed by our Human Rights Team and each supplier is awarded a rating score. This score is directly relevant to the awarding of a contract:<sup>3</sup>

- Based on the risks identified, the team categorizes each supplier as being a low, medium or high risk against our sustainability commitments.
- The team then assigns the relevant supplier a set of measures for preventing and mitigating risks<sup>4</sup> based on its sustainability risk profile.
- For suppliers with a low sustainability risk, we also consider a country risk score.<sup>5</sup> If the supplier has an increased country risk, they are moved up to the medium risk category.
- Our team updates the risk analysis once a year and/or as required by the Group Procurement sustainability policy in consultation with the relevant parent companies of the Volkswagen Group.

Implementation of the ReSC system is mandatory for all majority-controlled companies and is anchored in corresponding policies for the Volkswagen Group's brands and controlled companies.

As part of our ReSC system, we recently implemented the Human Rights Focus System (HRFS). The HRFS runs in parallel to the RMDDMS as a deep-dive measure for the most severe human rights risks across all tiers of the supply chain. More information about the HRFS can be found in our 2022 Sustainability Report (page 109).



 $<sup>^{\</sup>scriptscriptstyle 3}$  More information about the sustainability rating can be found in our 2022 Sustainability Report (pages 108 and 109).

<sup>&</sup>lt;sup>4</sup> Mitigation measures will be assigned once a risk is identified through an audit or via our grievance mechanism.

<sup>&</sup>lt;sup>5</sup> The country risk score considers both the country of operations and the headquarters country.

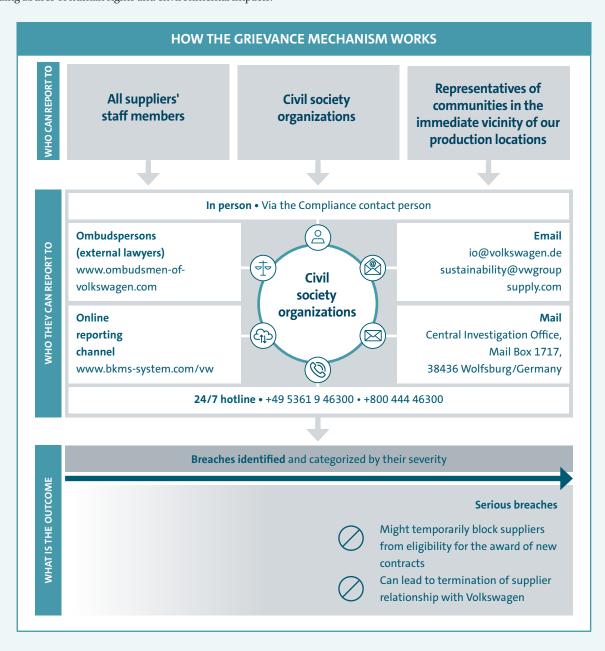
#### RESPONSIBLE SUPPLY CHAIN SYSTEM (ReSC SYSTEM) **RISK ANALYSIS MEASURES** RISK ASSESSMENT BASED ON THE INDIVIDUAL SUPPLIER RISK STANDARD MEASURES **DEEP DIVE** NATURE OF THE BUSINESS ACTIVITIES Probability and severity of Sustainability Supplier Rating\* Training Code of Grievance Media Conduct mechanism Screening Rating\* human-rights and environmental risks **Human Rights Focus System** + n tier high-risk suppliers high high Deep Dive Measures Analysis medium/ high-risk suppliers Across all tiers Severity\* suppliers medium medium \* The S-rating is set by the Volkswagen's Sustainability Rating team. Every supplier fills a Self-Assessment **Raw Materials Due Diligence System** Questionnaire (SAQ). It is processed by external service provider NQC Ltd. О Depending on the score and location low ΝO of the supplier, an on-site check might Impact Assessalso take place. The supplier is then Mitigation П evaluation graded A, B or C. A C-rating means ment that the supplier does not meet Country Risk Filter\* requirements for compliance with sustainability standards and is not Across eligible for contract awarding. More high all tiers medium low information about the S-rating can \* Severity for affected be found in the 2022 Sustainability Probability people and environments \* Both the country of the HQ and the country of operations set the filter Report (page 108).

### BOX 1

### SUPPLY CHAIN GRIEVANCE MECHANISM

We believe that grievance mechanisms are important for managing human rights and environmental risks in our supply chains. We have adopted a grievance mechanism that is designed to be used across our supply chains. Through this mechanism, we process concerns others have raised regarding negative human rights and environmental impacts. When a concern is brought to our attention, we investigate incidents relating to breaches, or suspected violations by business partners, of applicable legislation or the Code of Conduct for Business Partners of the Volkswagen Group, including abuses of human rights and environmental impacts.

Our grievance mechanism is accessible via the channels of the Volkswagen Group's whistleblower system and is open to all potentially affected stakeholders. In 2022, we received 145 reports through our supply chain grievance mechanism. More information about our grievance mechanism and the grievance report results for 2022 can be found in our 2022 Sustainability Report (pages 108 and 113).



## PARTICIPATION IN BROADER RAW MATERIALS SUSTAINABILITY INITIATIVES

In addition to our participation in several material-specific initiatives with a focus on responsibility and sustainability, we participate in various initiatives that are relevant across a range of minerals. By participating in these initiatives, we are able to collaborate with other actors in the sector and increase our leverage across all tiers of the supply chain and within the broader industry sector.

We often find that we have limited leverage beyond tier 1, and the further away a supplier is from us (mid-tier or upstream), the more challenges we face to exercise our leverage, especially if the supplier is not aligned with our expectations on responsible sourcing. We find there is a particular need to engage with midstream actors. This is because they play an important role as pinch points<sup>6</sup> in many supply chains, yet often have limited motivation to accept responsible sourcing requirements from downstream actors like ourselves as they have limited visibility to the end consumer and sometimes perceive a reduced risk of public scrutiny. These suppliers also tend to be located in jurisdictions with weaker regulatory requirements related to responsible business conduct and sustainability.

We have determined that industry initiatives can help us achieve our due diligence goals through knowledge-sharing, awareness-raising, developing standardized risk assessment tools, and implementing standards for the responsible sourcing of raw materials.



In 2022, we continued to be involved in several broader initiatives. One such initiative was our

engagement with Drive Sustainability, of which we are a founding member and remain a lead partner. Drive Sustainability is an automotive industry initiative with the shared goal of promoting a sustainable, responsible and circular automotive value chain. Information about our participation in material-specific initiatives can be found on the relevant material-specific pages 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.

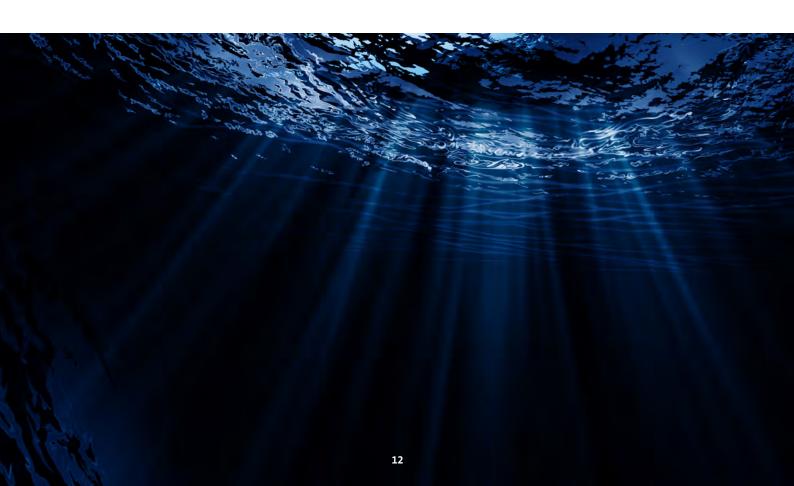
In addition to our participation in these initiatives, we seek to foster dialogue on responsible sourcing by taking part in various events, such as conferences and webinars. In 2022, we attended over 15 events of relevance to our responsible sourcing of raw materials and spoke at seven events, including conferences related to the automotive industry and its impact on human rights and the environment.

### BOX 2

### Moratorium on deep seabed mining

In 2022, the Volkswagen Group, alongside other companies, continued to support calls for a global moratorium on deep seabed mining. We do not source materials linked to this method of producing raw materials. More information about the pledge can be found in the 2021 Responsible Raw Materials Report (page 29).

<sup>&</sup>lt;sup>6</sup> A pinch point in a supply chain means a point, or tier, in the supply chain where there are few businesses as compared to other points in the supply chain.



## 4 OUR RAW MATERIALS DUE DILIGENCE MANAGEMENT SYSTEM IN ACTION

### **HIGHLIGHTS FROM 2022:**



We became a member of the Initiative for Responsible Mining Assurance (IRMA).



Most of our leather supplier sites were certified by the Leather Working Group by the end of 2022.



We introduced a specification sheet for leather.



We increased engagement on due diligence with suppliers in our battery supply chain and with new suppliers to PowerCo SE.



We contributed to a hydrological study to support dialogue around water- related risks in lithium mining in Chile through the Responsible Lithium Partnership.



We identified over 3,500 suppliers of parts containing tin, tantalum, tungsten and gold, which we included in our central database and increased our outreach to.



We engaged with Circulor to pilot a cobalt traceability system and learned about the benefits and limitations of this technology for our due diligence strategy.



Through Cobalt for
Development, we visited a
project site in the DRC and
contributed to discussions on
enabling responsible artisanal
and small-scale mining.



We took part in a workshop in the DRC with key stakeholders in the copper-cobalt sector organized by Drive Sustainability.



MAN Truck & Bus SE became a partner of the Copper Mark.

8

We reviewed the RMDDMS against the German Supply Chain Due Diligence Act, and developed and implemented the Responsible Supply Chain system to manage human rights and environmental due diligence for the Volkswagen Group.

### **RMDDMS IMPLEMENTATION IN 2022**

In this section, we describe the implementation activities of our RMDDMS that are overarching across numerous raw materials. This section also provides further information about RMDDMS implementation on a material-specific basis.

#### MEMBERSHIP OF IRMA

In March 2022, the Volkswagen Group became a member of the Initiative for Responsible Mining



Assurance (IRMA), which, as well as developing a standard for mine sites, is a multi-stakeholder alliance that advocates for higher social and environmental standards in mining. To inform this decision, we commissioned an expert consultant to analyze 16 mining standards that are applicable to large-scale mining (LSM) operations and judge them against criteria developed by Drive Sustainability, which include:

- · Applicability
- Structure
- · Assurance process and transparency
- · Governance and stakeholder engagement
- Continuous improvement
- Equivalency and cross-recognition among various standards
- Ambitiousness, judged on two case studies (water management and community engagement and development)
- Costs and timeline for adoption

The Volkswagen Group has committed to gradually apply the IRMA Standard for Responsible Mining in its battery supply chains.

In 2022, we trained colleagues in our procurement area on the IRMA standard and how we apply it,<sup>7</sup> and we have been vocal in external forums regarding our support for IRMA. We have aimed to be fully supportive of IRMA's efforts to engage with mining-affected communities, civil society and labor unions on how IRMA's system can serve as a tool for meaningful engagement to improve mining practices globally.

### **POWERCO SE**

In 2022, the Volkswagen Group consolidated its global battery activities by establishing



PowerCo SE. The company facilitates the vertical integration of our battery supply chain, from raw materials to battery cells to recycling. One benefit of this increased vertical integration is that we are closer to different tiers of the supply chain, which can make it somewhat easier for us to effectively manage human rights and environmental risks across these tiers.

As part of the 2022 raw materials purchasing activity by PowerCo SE, we conducted an analysis of social and environmental risks in potential suppliers' supply chains, with particular focus on mine sites located in high-risk countries. We also discussed with these suppliers our expectations regarding environmental and social performance, especially at the mine sites. During these discussions, we encouraged our suppliers to implement the IRMA standard and to undergo IRMA's certification process. We believe adherence to the IRMA standard will improve mining companies' overall sustainability performance and strengthen their implementation of responsible mining practices.

### **RAW MATERIALS SPECIFICATION SHEETS**

As a key component of our raw materials due diligence, we invest in developing and implementing raw materials specification sheets. By requiring new suppliers to comply with our specification sheets as part of the supplier contract, we are able to make our human rights and environmental expectations clear from the outset and make them a binding requirement. The use of the specification sheets also allows us to address concerns we might have with suppliers and help put in place mitigation measures early on in the sourcing process. The specification sheets also include requirements on supply chain transparency and the implementation of a due diligence system in line with the OECD Minerals Guidance.

In 2020, we created and implemented a specification sheet for EV battery raw materials, which covers several materials (lithium, cobalt, nickel and graphite).

Battery suppliers that we established contracts with after 2020 are required to comply with the battery specification sheet as well as with our Code of Conduct for Business Partners, which defines our sustainability requirements.

We strongly encouraged most battery suppliers that had existing contracts with us prior to 2020 to comply with the requirements in the battery specification sheet.

In 2022, the Volkswagen Group introduced a specification sheet for leather and started to prepare for the roll-out of the mica and aluminum specification sheets, which will take place in 2023.

<sup>&</sup>lt;sup>7</sup> We also invited other colleagues from our Legal, Compliance and Communications departments to the IRMA training.

## ONGOING ENGAGEMENT WITH SUPPLIERS, INDUSTRY AND STAKEHOLDERS

### **SUPPLIERS**

The Volkswagen Group continues to prioritize ongoing engagement with key suppliers across different raw materials value chains through interviews, regular calls, meetings and email exchanges. Supplier engagement is an important tool to help us establish and increase alignment with our suppliers around expectations such as transparency in our raw materials supply chains<sup>8</sup> and to support and encourage our suppliers to meet our responsible sourcing requirements and expectations.

### INDUSTRY AND OTHER STAKEHOLDERS

The Volkswagen Group is continuing to engage with the automotive industry and other stakeholders as an exercise in increasing our leverage. Drive Sustainability participated in various engagements through the Extractives for Sustainability project. These events included:

- A stakeholder dialogue: the event took place in May 2022 in Lubumbashi, the DRC, moderated by CSR Europe and the DRC's Chamber of Mines. The purpose of the event was to introduce the Extractives for Sustainability project and engage with relevant stakeholders in the country, including the participating mining companies, subcontractors, governmental authorities, civil society organizations, ASM cooperatives and international organizations. The event was attended by more than 70 stakeholders and was the first on-the-ground milestone in the realization of the project.
- Training workshop: CSR Europe and the DRC's Chamber of Mines
  delivered their first training workshop in November 2022 in Kolwezi,
  the DRC. This two-day event was attended by mining companies,
  their subcontractors and four different original equipment
  manufacturers (OEMs) from Drive Sustainability. The first day of the
  event involved training and developing the skills of the local
  workforce, while the second day focused on local community
  development.

Additionally, we engaged with various stakeholders through:

 A benchmarking exercise with the Aluminium Stewardship Initiative (ASI), where we benchmarked their own standard against Drive Sustainability's Common Standards Recognition Framework. We then engaged in a dialogue with industry standard-setters to compare the benchmarking results and evaluate potential options for improvement.

- Participating in the EIT RawMaterials Expert Forum, where we connected with experts in innovation and education from industry, research organizations and universities and addressed topics around sustainability in supply chains.
- A session around the EU Deforestation-Free Regulation (EUDR), which took place on 12 December 2022. The session connected Drive Sustainability, Drive+ members, external stakeholders and experts for the first informal debate on the EUDR and its impact on the automotive sector. The objectives of the session were to help Drive Sustainability and Drive+ members better understand: (i) how the EUDR will impact their business sector; (ii) what companies should expect from the final version of the EUDR; and (iii) share leading practice among OEMs and their suppliers for an approach that goes beyond compliance.

### SUSTAINABILITY TRAINING AND WORKSHOPS

Systematic training of our employees and suppliers is a central component of our strategy and is essential for improving sustainability in our supply chain. For all procurement employees, the topic of sustainability is an established part of the skills profile. In 2022, all new employees in Volkswagen Brand Procurement received training on sustainability. The sustainability training sessions were based on topics such as: (i) corporate responsibility; (ii) legal frameworks and requirements; (iii) our internal processes, for example, the Volkswagen Group's sustainability rating; and (iv) our management systems, such as the RMDDMS.

Depending on the topic, the training sessions were web-based (pre-recorded), online (live) or in-person and lasted between 30 and 90 minutes. The web-based training was available in various languages, while the online and in-person training was conducted in English and German.

Part of this training was dedicated to the topic of sustainability in raw materials. The training enabled new employees to understand how the RMDDMS fits into broader procurement practices. The training course on sustainability for procurement was delivered more than 2.000 times worldwide in 2022.

<sup>&</sup>lt;sup>8</sup> When referring to transparency in our raw materials supply chains, we are referring to the Volkswagen Group's ability to gather and analyze information about raw materials, actors, geographies, business activities, and human rights and environmental risks associated with our raw materials supply chains. When we are able to gather and analyze this information to a significant degree, we consider that we have achieved higher transparency in the supply chain.

<sup>&</sup>lt;sup>9</sup> The Extractives for Sustainability project is focused on setting up local sustainability networks in both the DRC and South Africa, to strengthen responsible sourcing and due diligence practices in the battery value chain. The project identifies and works with local organizations that are interested in developing, implementing and coordinating a local sustainability network.

<sup>&</sup>lt;sup>10</sup> During the first half of 2022, most of the training was conducted online because of COVID-19 restrictions.

<sup>&</sup>lt;sup>11</sup> A sustainability rating (S rating) was introduced in 2019 as a key measure for all relevant companies and suppliers with a high sustainability risk. For more information on our sustainability rating, please see the 2022 Sustainability Report (page 108).

To support continuous supplier development in responsible business, we conducted issue-specific sustainability training courses and workshops with our suppliers at selected locations or online. We also offered web-based on-demand training. More than 2,900 suppliers attended a training session in 2022. This includes 245 suppliers that use Drive Sustainability's online training and e-learning options.

We continued to offer our optional human rights training for suppliers, which has been available since 2020 and is more in-depth. In addition to these training courses, we made an e-learning module on sustainability available to our suppliers in nine languages.

In 2022, we trained 103 new purchasing colleagues from the Volkswagen Group on the RMDDMS and on the importance of the responsible sourcing of raw materials.

### USING AUDITS IN VARIOUS RAW MATERIALS SUPPLY CHAINS

Owing to the complexity and the high number of suppliers in our battery supply chain, the Volkswagen Group uses a risk-based approach to selecting suppliers for audit.

We initially focused our battery audit program on the cobalt supply chain because of the severity of human rights risks associated with cobalt. However, other battery raw materials, such as lithium and nickel, were also covered in the audits for some of the processing steps. Furthermore, we have worked our way up the supply chain, starting with our immediate battery suppliers and moving towards precursors, refiners, treatment units and a mine site.

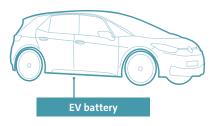
Based on our battery supply chain mapping results, we carried out a risk assessment of the identified battery suppliers. The audit program was divided into two parts: initial audits and re-audits. This approach helps us: (i) track our progress in terms of the number of audits across our supply chain; and (ii) monitor improvement measures taken by re-audited suppliers.

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

	Tin, tantalum, tungsten and gold	Cobalt	Leather
Audit standard	Responsible Minerals Assurance Process (RMAP) (Responsible Minerals Initiative)	Customized standard developed by Volkswagen with its auditor, RCS Global. Draws on the OECD Minerals Guidance	Customized standard developed by the Leather Working Group
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
Tier(s) that have been audited	Smelters and refiners	From battery cell to treatment unit level	Tanneries

## LITHIUM

### **KEY APPLICATION**



### **RISK ASSESSMENT**

Currently, we do not directly source lithium. We continued to engage with battery cell producers and collected data through our lithium supply chain mapping questionnaire, which we analyzed and assessed to identify any responsible sourcing risks. Many of our lithium risk assessment activities have remained the same as those discussed in our 2021 Responsible Raw Materials Report (page 13).

We have assessed risks related to our lithium supply chain in Chile as medium to low. We have done this through our on-the-ground assessment with international and regional experts via interviews with local stakeholders (2020).<sup>12</sup> Two lithium mine sites in Chile are also undergoing IRMA assessments.

As noted on page 4, since 2020, we have been able to introduce contractually binding requirements to increase our EV battery supply chain transparency through our battery specification sheet, compliance with which is mandatory for all new battery sourcing activities.

### **RISK MITIGATION**

See page 18 regarding engagement with suppliers in the lithium supply chain.

As discussed in our 2021 Responsible Raw Materials Report (page 31), we launched the Responsible Lithium Partnership in Chile along with several industry partners. In 2022, we undertook various activities through this partnership, such as contributing to a hydrological study and presenting its findings to the partnership. For more information about the Responsible Lithium Partnership, see Box 3.

Thanks to the risk mitigation measures we have taken, we believe we have been able to contribute to reducing the severity of risks in our lithium supply chain, particularly for lithium coming from Chile.

### KEY MATERIAL-SPECIFIC RISKS



Adverse environmental impacts



Risks to workers' occupational health and safety

<sup>&</sup>lt;sup>12</sup> These stakeholders included Indigenous people and mining communities

In 2022, we continued to participate in the German Automotive Sector Dialogue lithium working group, mainly through our representative from one of our brands. Over the past two years, the working group has jointly assessed the human rights and environmental risks associated with lithium mining, identified focus geographies with heightened risks, and developed recommendations for the lithium mining industry regarding effective means to manage these risks. The recommendations for responsible lithium mining focused on: (i) impact assessment; (ii) human rights and environmental risk management; (iii) consultation with affected people; and (iv) respect for the role of human rights and environmental defenders. They are complemented by recommendations for an effective integration into downstream due diligence processes.

In 2022, we took part in exchange and discussion sessions with lithium mining companies, representatives of affected communities and rights-holders as well as respective experts. The exchange and discussion sessions were designed to help the working group test the appropriateness and feasibility of the recommendations for responsible lithium mining.

Through our participation in this working group, we have gained additional insights into human rights and environmental due diligence practices regarding lithium mining, learned about existing practices by selected mining companies, and learned about the perspective of affected communities and rightsholders. By participating in the lithium working group, we strive to increase our understanding of challenges in lithium supply chains and extend our leverage to support responsible lithium mining.

We continued to follow up with our selected sub-suppliers at the mining level regarding their progress on the IRMA certification. For example, in 2022, we held two meetings with two lithium mining companies and another two meetings with midstream lithium representatives. We used these exchanges to explain our motivation for joining IRMA and to check on progress at mine sites with the IRMA certification.

### **OUTLOOK 2023**

We plan to:

- Further promote the IRMA standard across our EV battery supply chain
- Continue supporting local stakeholders in Chile at the lithium mining level in addressing water sustainability issues through the Responsible Lithium Partnership
- Continue expanding our lithium supply chain mapping in close cooperation with our major battery suppliers
- Continue our supplier engagement through regular calls, meetings, email exchanges and interviews and continue to welcome feedback on our actions.



### вох з

### RESPONSIBLE LITHIUM PARTNERSHIP

In 2022, we continued to participate in the Responsible Lithium Partnership.

### **ABOUT THE PARTNERSHIP**

Owing to the expansion of e-mobility and digitization, demand for lithium as a key material in batteries is expected to grow in the coming years. As announced in our 2021 Responsible Raw Materials Report (page 31), the Volkswagen Group, together with partners, <sup>13</sup> established the Responsible Lithium Partnership, which seeks to promote sustainable development and improved natural resource management.

The partnership focuses on the responsible use of resources and sustainable lithium production in Chile's Salar de **Atacama region**.

This region holds the world's

This region holds the world's largest known lithium reserves and accounted for 28 percent of global lithium production in 2022. The Salar de Atacama ecosystem is fragile, and there is a need to study and analyze ecological and hydrological impacts in the area. Moreover, historically, there has been a lack of multilateral dialogue and a low level of trust between the various actors in the region.

### The Deutsche Gesellschaft für Internationale Zusammenarbeit

(GIZ) – the German Agency for International Cooperation – has been commissioned to coordinate the partnership, seeking to find common ground by creating a multi-stakeholder platform and inviting all the relevant players in the Salar de Atacama watershed, namely civil society groups (including Indigenous Communities), government institutions and mining companies. The entire process is led by a strategic working group.

### **OBJECTIVE**

The platform seeks to promote collaboration and consensus among stakeholders in the Salar de Atacama watershed. This involves developing a shared understanding of the current situation and creating a collective vision for the future. The members of the platform aim to work together to create a joint action plan that will improve long-term natural resource management and take the first steps towards implementing this plan.



Through a technical working group, the initiative gathers and evaluates technical data related to lithium production to ensure that information is widely available and helps reduce any scientific uncertainties that may arise.

#### **ACTIVITIES IN 2022**

Currently, 22 stakeholders are members and active participants in Mesa Multiactor.<sup>14</sup> Together, as well as agreeing on the goals and work plan of this initiative, the members have already begun to reach a consensus on the concrete aspects that are to be implemented. Some of these include:

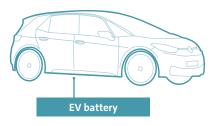
- Creating an awareness-raising campaign targeting local audiences to emphasize the importance of safeguarding water in the region
- Creating a cadastre of the holders of water rights on the basin's rivers
- Mapping the geological and hydrological river course to better understand its behavior
- Creating a publicly available training program on water-related issues for the inhabitants of the basin, in collaboration with the water management authority
- Researching new irrigation technologies
- Compiling existing public data and studies on the Salar de Atacama to make knowledge about the region more widely accessible

<sup>13</sup> The partners include BASF SE, BMW Group, Daimler Truck AG, Fairphone and Mercedes-Benz Group. The partnership is supported by the German Agency for International Cooperation, GIZ.

<sup>14</sup> Mesa Multiactor is a multi-stakeholder round table that enables dialogue between organizations, indigenous communities and institutions that carry out productive, social and/or cultural activities in the Salar de Atacama basin, and which seek to collaboratively resolve information gaps on the basin and reach agreement on priority issues related to the sustainability of the region.

## COBALT

### **KEY APPLICATION**



### **RISK ASSESSMENT**

Currently, we do not directly source any battery raw materials, including cobalt. We continued to engage with battery cell producers and collected data through our cobalt supply chain mapping questionnaire, which we analyzed and assessed to identify any responsible sourcing risks. Working closely with our battery suppliers through our cobalt supply chain mapping and audit program, we have identified and prioritized certain suppliers.

As noted on page 4, in 2020, we introduced our EV battery specification sheet in order to increase transparency. It is mandatory for all new battery suppliers to comply with our battery specification sheet in new sourcing activities. We engage with our cobalt suppliers closely on this specification sheet, and we have conducted audits in the supply chains of two of our cobalt suppliers to better understand the risks.

In 2022, we were particularly active with supplier engagement in our battery materials supply chain. We regularly engaged with all six of our battery suppliers through group or individual calls. These took place between four and six times during 2022 with five suppliers, and, with the sixth supplier, twice monthly. During these meetings, we addressed numerous topics, such as:

- The implementation of our battery specification sheets as a means of increasing transparency up to the mining level
- Progress on closing corrective action plans (CAPs) identified through a tailored audit, conducted at the beginning of 2022 (which will be repeated at a later stage), that examined battery suppliers' capacity, budget, knowledge and strategy on responsible sourcing
- Assessing the RMI/RCS audit status for the cobalt supply chain and how to move forward with suppliers
- The introduction of the EU Battery Regulation
- Our membership of IRMA in response to high-level risks at the mining level, and our request to these suppliers to also join IRMA

### KEY MATERIAL-SPECIFIC RISKS



Child labor



Modern slavery



Systematic or

widespread human rights abuses associated with the extraction, transportation and trading of the raw

material



Human rights abuses committed by public or private security forces



Direct or indirect support to non-state armed groups or public or private security forces



Risks to workers' occupational health and safety



Adverse environmental impacts



Infringement of labor rights



Discrimination and harassment, including against vulnerable groups

We also held meetings with 10 midstream and upstream suppliers in the cobalt supply chain, where we highlighted the need for responsible raw materials supply chains and explained our approach to sustainability.

In 2022, we conducted detailed on-the-ground assessments at two mine sites (for battery raw materials), evaluating them against our standards and IRMA's critical requirements. From these assessments, we gained a detailed understanding of how these mines manage human rights and environmental risks, how likely it is that the sites will achieve IRMA certification and whether corrective action is needed.

To monitor cobalt supply chain risks and carry out risk-based media screening of relevant suppliers, we continued to implement an intelligent sustainability radar for the supply chain based on an artificial intelligence (AI) algorithm developed by an external service provider.

We remained on the advisory board of a responsible mining standard, known as CERA 4in1, which was piloted in 2021. The CERA 4in1 pilot project was ongoing in 2022. More information about the project can be found in our 2021 Raw Materials Report (page 15).

### **RISK MITIGATION**

RCS Global<sup>15</sup> audited all six of our battery suppliers at the beginning of 2022. These audits helped us verify upstream transparency information, assess their alignment with the OECD Minerals Guidance, and better understand their overall preparedness to comply with different requirements, such as those set out in our battery specification sheet or the upcoming EU Battery Regulation. Based on these audits, we established detailed CAPs, which were agreed with the suppliers.

We have continued to engage with Cobalt for Development (C4D), a cross-industry initiative implemented by GIZ that works to support communities dependent on artisanal cobalt mining in the DRC's Lualaba Province. More information about C4D can be found in our 2021 Responsible Raw Materials Report (page 30). In 2022, we participated in a trip to the DRC to visit one of the project sites. Key takeaways from this trip can be found on page 22 and 23 of this report. Together with RCS Global, we have developed a customized standard for our cobalt suppliers and continued our auditing program. In 2022, we carried out 29 audits with our cobalt suppliers; six of these audits were conducted on our immediate cobalt suppliers and 23 on suppliers beyond tier 1. None of the audited suppliers scored 100 percent, but eight of the suppliers accepted a CAP and four more suppliers are in the process of accepting one.

In 2021, we worked with a cobalt mining company to pilot a comprehensive sustainability audit, using the CERA 4in1 standard, at a large-scale cobalt mine site in the DRC. In 2022, we developed concrete measures for the mine as part of a CAP. These measures include:

- maintaining a minimum safe distance to operating machinery to ensure no miners were caught by moving or rotating parts
- increasing safety training and the number of safety signs
- · installing safety nets to prevent falls into liquids
- updating vehicle and machinery maintenance
- · restricting access to on-site construction sites
- improving waste assessment and management
- · constructing bund walls to prevent liquid spills

Owing to internal changes within the mining company, the pilot project was not completed in 2022.

In light of the upcoming EU Battery Regulation, the Volkswagen Group commissioned Circulor, a supply chain traceability software company, to complete a project demonstrating the traceability of cobalt from the electric vehicle back to the mine site. The main challenges included the increased time and effort required to onboard smaller midstream participants onto the project as well as other traceability providers being open to interoperability. The project helped us test and compare transparency and traceability software solutions. Our traceability and transparency efforts will continue in high-risk battery-critical materials in order to help evidence responsible sourcing claims and to help position the Group to comply with the new EU Battery Regulation.

<sup>15</sup> RCS Global is an organization that develops and manages custom supplier audit programs focused on certifying and proving good practice in responsible sourcing and responsible mining.

### **OUTLOOK 2023**

### We plan to:

- Continue expanding our cobalt supply chain mapping and audit program
- Increase training and education as part of the audit program, so that suppliers are better equipped to identify and mitigate human rights and environmental risks
- Finalize the CERA 4in1 pilot project and define the next steps for the project
- Progressively apply the IRMA standard across our EV battery supply chain
- Continue our stakeholder dialogue through regular contact and continue to welcome feedback on our actions

### BOX 4

### **COBALT FOR DEVELOPMENT**

We joined Cobalt for Development (C4D) in 2020 to explore whether and how ASM cobalt mining can be conducted in a responsible manner in the DRC, in line with national laws and international norms. The first phase of the project was due to end in 2021 but was extended to 2022 with the aim of identifying a legal pilot mine site.

In November 2022, we participated in a trip to one of the project sites in the DRC. C4D has been working with cooperatives, artisanal miners and the government authority, SAEMAPE, to create interactive training materials and methods that underpin the project's capacity development methodology. Some of the project's achievements are outlined below.



C4D continues to successfully implement activities to improve the livelihoods of the surrounding communities, having already reached 3,000 direct beneficiaries.<sup>16</sup> Some of the specific results are described below.

Based on the work carried out in the last three years and lessons learned during this process, C4D will continue expanding its activities, working to pilot a novel pathway to help with ASM formalization efforts in the DRC.



### BOX 5

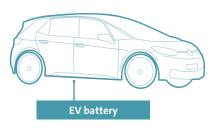
## RESPONSIBLE MINING PRACTICES IN SUB-SAHARAN AFRICA

In parallel to the C4D trip to the DRC, which took place in November 2022, we attended a workshop in the DRC organized by Drive Sustainability and CSR Europe. The workshop included various key actors in mining, including the DRC minister of mines. The workshop served as a platform to engage directly with local miners from the DRC's copper-cobalt sector. The Volkswagen Group used the workshop as an opportunity to speak to different mining companies about topics related to due diligence, and to raise awareness about the IRMA standard and our expectations regarding responsible sourcing.

<sup>&</sup>lt;sup>16</sup> As of October 2022.

## **NICKEL**

### **KEY APPLICATION**



### **RISK ASSESSMENT**

Currently, we do not directly source any battery raw materials, including nickel. We continued to engage with battery cell producers and collected data through our nickel supply chain mapping questionnaire, which we analyzed and assessed to identify any responsible sourcing risks. Many of our nickel risk assessment activities have remained the same as those discussed in our 2021 Responsible Raw Materials Report (page 16).

As noted on page 4, since 2020, we have been able to increase our EV battery supply chain transparency through our EV battery specification sheet. It is mandatory for all new battery suppliers to comply with our battery specification sheet in new sourcing activities.

As discussed in our 2021 Responsible Raw Materials Report (pages 4 and 12), we contributed to the 2021 development and launch of the Raw Material Outlook platform (Raw Material Outlook), which provides material-specific market data and information about human rights and environmental risks relevant to its supply chains. Nickel is one of the critical raw materials covered in the platform, which was updated in 2022.

In 2022, we continued to review the data provided by the Raw Material Outlook to support our supply chain mapping and salient risk identification.

### KEY MATERIAL-SPECIFIC RISKS



Child labor



Modern slavery



Systematic or

widespread human rights abuses associated with the extraction, transportation and trading of the raw

material



Human rights abuses committed by public or private security forces



Direct or indirect support to non-state armed groups or public or private security forces



Risks to workers' occupational health and safety



Adverse environmental impacts



Infringement of labor rights



Discrimination and harassment, including against vulnerable groups

We engaged with stakeholders through outreach to the Nickel Institute, which was organized by Drive Sustainability. Given that nickel and rare earth elements (REE) have been prioritized for engagement activities, Drive Sustainability had several exchanges with the Nickel Institute to: (i) communicate downstream expectations towards upstream actors; (ii) develop a shared understanding of the sustainability issues related to nickel sourcing; and (iii) discuss the criteria that make sustainability standards credible.

### **RISK MITIGATION**

See page 21 for more information about our engagement with our battery materials suppliers in the section on cobalt.

In 2022, we were in contact with numerous major nickel mining companies. Continuing our previous activities, we conducted several sustainability workshops and engaged in dialogue with these companies to assess whether they comply with the IRMA standard.

As an active member of the Drive Sustainability partnership, we supported advocacy and engagement efforts across various industries and standards-setting groups, including the Nickel Institute, regarding the alignment of nickel certification standards under the joint Due Diligence Standard for Copper, Lead, Nickel and Zinc. While we understand that materials standards are used by multiple actors across the value chains for various purposes, the Volkswagen Group believes it is important for all relevant actors to take a coordinated approach regarding responsible business conduct.



We believe that standards alignment is important to reduce the burden on suppliers, increase coherence and, ultimately, to enhance the impact of standards usage. We also sought to develop a shared understanding of sustainability issues related to nickel sourcing and discussed criteria that increase the credibility of sustainability standards.

As well as our engagement with the Nickel Institute, we participated in joint outreach with additional nickel supply chain actors, as organized by Drive Sustainability. As part of these efforts, we held two meetings with the nickel industry in 2022. The meetings helped to raise awareness in the nickel industry about the importance of responsible sourcing and highlighted how the automotive industry is closely monitoring the nickel supply chain with regard to human rights and environmental issues.

As discussed above on page 21 of this report, we have used media screening for risk mitigation.

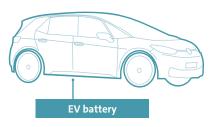
### **OUTLOOK 2023**

We plan to:

- Continue expanding our nickel supply chain mapping and audit program
- Progressively apply the IRMA standard across our EV battery supply chain and conduct further IRMA audits in our nickel supply chain
- Continue our stakeholder dialogue through regular contact to better understand risks and identify further opportunities for engagement

## NATURAL GRAPHITE

### **KEY APPLICATION**



### **RISK ASSESSMENT**

Currently, we do not directly source any natural graphite. We continued to engage with battery cell producers and started collecting data through our graphite supply chain mapping questionnaire. Many of our graphite risk assessment activities have remained the same as those discussed in our 2021 Responsible Raw Materials Report (page 17).

As explained on page 4, graphite is covered in the battery specification sheet, which helped us increase our EV battery supply chain traceability. It is mandatory for all new battery suppliers to comply with our battery specification sheet in new sourcing activities.

Graphite is one of the critical raw materials covered in the Raw Material Outlook, which was discussed on page 24 of this report. The platform was updated in 2022.

### **RISK MITIGATION**

See page 21 for more information about our engagement with our battery materials suppliers in the section on cobalt.

### **OUTLOOK 2023**

### We plan to:

- Continue implementing and expanding our supply chain mapping program in close cooperation with our major battery suppliers
- · Further investigate risks in the battery supply chain
- Continue our stakeholder dialogue through regular contact and continue to welcome feedback on our actions

### KEY MATERIAL-SPECIFIC RISKS



Human rights abuses committed by public or private security forces



Risks to workers' occupational health and safety



Adverse environmental impacts



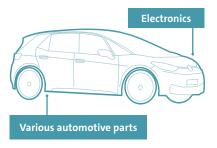
Infringement of labor rights



Threats to indigenous people and communities

## TIN, TANTALUM, TUNGSTEN AND GOLD (3TG)

### **KEY APPLICATION**



### **RISK ASSESSMENT**

3TG supply chains can be highly complex, involving many actors. In 2022, we worked to increase transparency along our 3TG supply chain by collecting relevant supplier data. To collect this data, we use the RMI's Conflict Minerals Reporting Template (CMRT). The CMRT is a free, standardized reporting template that facilitates the transfer of information through the supply chain regarding mineral country of origin and the smelters and refiners used. The template also makes it easier to identify new smelters and refiners to potentially undergo an audit via the RMI's Responsible Minerals Assurance Process (RMAP). As well as using the CMRT as a key tool to collect information, we have continued to use a software solution, Assent, which includes a third-party database, to improve the quality of the traceability data we receive from suppliers.

We expanded our supplier outreach in line with our ongoing due diligence process. Through collective industry outreach, including our partner Assent and using the CMRT, we identified and engaged with a greater number of relevant tier 1 suppliers compared with previous years. We did not achieve this goal for 2022, namely because the number of relevant suppliers of 3TG more than doubled (to 3,800). We did see an increase in the number of absolute responses compared with 2021, but because of the increased number of 3TG suppliers overall, we missed the 75 percent figure and attained a 62.9 percent response rate.

We have determined country of origin data for the majority of our smelters. Lists identifying our smelters and countries of origin can be found in Annex III of this report.

### KEY MATERIAL-SPECIFIC RISKS



Child labor



Modern slavery



Systematic or

widespread human rights abuses associated with the extraction, transportation and trading of the raw

material



Human rights abuses committed by public or private security forces



Direct or indirect support to non-state armed groups or public or private security forces



Risks to workers' occupational health and safety



Adverse environmental impacts



Infringement of labor rights



Discrimination and harassment, including against vulnerable groups



Threats to indigenous people and communities

<sup>&</sup>lt;sup>17</sup> Assent is a supply chain management solution.

<sup>&</sup>lt;sup>18</sup> We engaged with 3,786 tier 1 suppliers.

### **RISK MITIGATION**

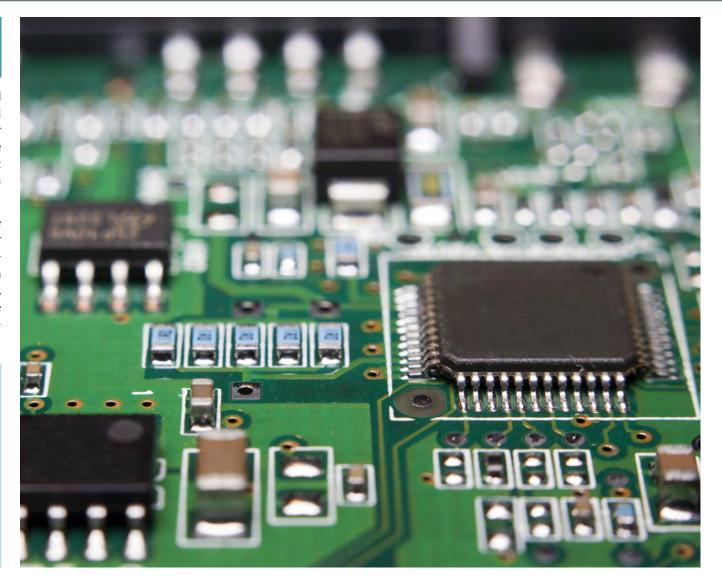
We participated in the smelter engagement team and the gold team, coordinated by the RMI. Through this engagement and together with other RMI members, we have worked with a number of our smelters to encourage them to undergo RMAP audits in the hope of increasing the overall number of RMAP-conformant smelters and fostering responsible sourcing practices in 3TG supply chains.

To determine if a supplier is compliant with our requirements, we look at whether the smelter is RMAP-conformant, and check for any negative media reports about the smelter.<sup>19</sup> "RMAP-conformant" means that a smelter has successfully completed an RMAP audit and maintained good standing in the program, through a continual validation process. Of the smelters we have identified in our supply chain, nearly 65 percent were RMAP-conformant as of the end of 2022.

### **OUTLOOK 2023**

We plan to:

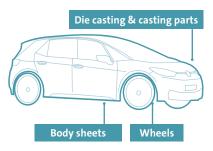
- Continue to work on increasing traceability and transparency along our 3TG supply chain by collecting data and engaging with our most critical tier 1 suppliers (based on the smelter risk profile and/or the quantity of 3TG materials used in their products)
- Reduce the percentage of non-compliant 3TG smelters in our supply chain



<sup>&</sup>lt;sup>19</sup> A smelter/refiner may become a smelter of concern if negative media coverage proves to be significant.

## **ALUMINUM**

### **KEY APPLICATION**



### **RISK ASSESSMENT**

Our risk identification approach in the aluminum supply chain continued to focus on engagement with the Aluminium Stewardship Initiative (ASI), a global multi-stakeholder standard-setting and certification organization that is focused on fostering the responsible production, sourcing and stewardship of aluminum.

Based on information it has gathered via audits, stakeholder engagement and research, the ASI continued to provide valuable insights for our risk assessment in our aluminum supply chain.

In 2022, the Volkswagen Group developed an aluminum specification sheet, which will become a binding requirement for all our aluminum suppliers in selected material groups from 2023 onwards.

### **RISK MITIGATION**

Although more entities are joining ASI and getting certified against its standards, many of our suppliers are still not ASI-certified and do not supply ASI-certified material. We have decided to continue to promote ASI certification in our supply chain, and work to increase the demand for ASI-certified material.

Audi AG, as a member of the Volkswagen Group, became the first car manufacturer to be awarded the ASI Chain of Custody Standard certificate in 2020. In 2022, Audi AG worked on ensuring that the sourcing of ASI-certified aluminum will become a Group-wide sourcing requirement for all aluminum body sheets in 2023. To comply with this requirement, suppliers in the selected material groups will be required to obtain ASI certification and deliver ASI-certified material.

The Volkswagen Group also engaged with the recycling industry through the Verband Deutscher Metallhändler und Recycler (VDM) in Germany about our responsible supply chain strategy and the availability of ASI-certified material in the recycled aluminum value chain. Information on aluminum is available in the Raw Material Outlook (discussed on page 24 of this report), which was updated in 2022.

### **OUTLOOK 2023**

We plan to:

- Continue to promote ASI certification and support suppliers to improve their responsible sourcing practices
- Make ASI certification and the delivery of ASI-certified material a mandatory requirement for all automotive body sheets in the Volkswagen Group
- Develop a step-by-step ASI roll-out plan for selected aluminum material groups, starting with those used for aluminum body sheets and based on sourcing volume and material availability

### KEY MATERIAL-SPECIFIC RISKS



Child



Modern slavery



Systematic or widespread human rights abuses associated with the extraction, transportation and trading of the raw material



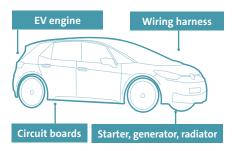
Adverse environmental impacts



Threats to indigenous people and communities

### **COPPER**

### **KEY APPLICATION**



### **RISK ASSESSMENT**

The key element of our risk assessment approach for copper continues to be our active involvement in the Copper Mark, an industry initiative and assurance framework for responsible copper production. We have had a seat on its advisory council since the end of 2019 and have participated in regular meetings, providing a downstream perspective on the Copper Mark assurance process and the Chain of Custody Standard. Information gathered from the Copper Mark audits and stakeholder engagement has provided us with valuable insights for the risk assessment of our copper supply chain.

### **RISK MITIGATION**

Considering the complexity of copper supply chains and the wide use of copper by many value chain actors, the Volkswagen Group recognizes that complete supply chain transparency, all the way up to mining activities, is not always possible. We prioritized increasing our understanding of our copper supply chain and its human rights and environmental risks through supply chain mapping. We did this by sending out our supply chain mapping questionnaire to our immediate suppliers and asking them to complete it.

In 2022, we launched a pilot project with some tier 1 suppliers that deliver the highest quantity of copper to us. The pilot project served as a platform to engage with these suppliers. It has allowed us to monitor our suppliers through our supply chain mapping questionnaire and evaluate whether these suppliers are sourcing Copper-Mark-certified copper. The pilot project also helped us understand how to best facilitate traceability along the supply chain and how to implement Copper Mark certification in the supply chain of our main suppliers.

In 2022, we gave a presentation on the responsible procurement of copper in the Volkswagen Group at NE Drahtforum, the non-ferrous wire forum. We also used this event as an opportunity to enter into dialogue with some of our suppliers.

MAN Truck & Bus SE became an official partner of the Copper Mark in 2022 and is a member of its advisory council.

#### **OUTLOOK 2023**

We plan to:

- · Create a sustainability specification sheet for copper
- Intensify our work with the Copper Mark and participate in the Copper Mark impact working group
- Define copper-related key performance indicators through our RMDDMS
- Include more suppliers in our tier 1 suppliers (focus group), which will allow us to cooperate with these suppliers and clarify our expectations of them regarding responsible sourcing

### KEY MATERIAL-SPECIFIC RISKS



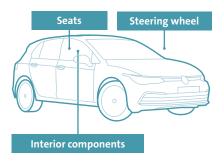
Adverse environmental impacts



Threats to indigenous people and communities

### LEATHER

### **KEY APPLICATION**



### **RISK ASSESSMENT**

Since 2021, the Volkswagen Group has been reviewing sector studies to supplement our collection and assessment of the supply chain data we gather through direct supplier outreach. These information sources include Drive Sustainability's Raw Material Outlook (discussed on page 24 of this report), reports by the World Wide Fund for Nature (WWF) and TDi Sustainability, and interactions with NGOs and industry initiatives, including the Leather Working Group (LWG).

In 2022, we implemented our sustainability specification sheet for leather, which is to be applied throughout the Volkswagen Group. The leather specification sheet sets out sustainability requirements for all new leather suppliers as well as existing suppliers that have been nominated for a new project. Some of these binding requirements include:

- Transparency on the raw-hide provenance (country of origin)
- Leather-specific sustainability certificate (LWG certificate) for respective production sites once they have passed LWG leather-specific audit
- Raw hides and upstream material associated with illegal deforestation is excluded
- Further due diligence measures for raw hides that come from high-risk countries<sup>20</sup>
- · Animal welfare standards need to be respected

### KEY MATERIAL-SPECIFIC RISKS



Adverse environmental impacts



Risks to workers' occupational health and safety

### **RISK MITIGATION**

We recognize the importance of engaging with NGOs and using their expertise to further our sustainability requirements. In 2022, we engaged with the WWF on further developments regarding the leather specification sheet, including feedback on topics related to deforestation.

Although only Bentley is currently a member of LWG, we are due to finalize our Group-wide membership of LWG in 2023. This will extend our sustainability requirements to all suppliers in the Volkswagen Group. LWG has set different standards for different actors in the leather supply chain. As of the end of 2022, the majority of our supplier sites have been certified by LWG.

### **OUTLOOK 2023**

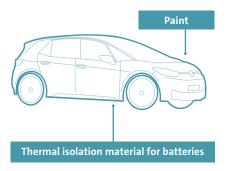
We plan to:

- Develop an updated version of the sustainability specification sheet for leather and facilitate compliance with newly implemented legislation, such as the EU Deforestation-Free Regulation (EUDR) (discussed in more detail on page 42 of this report), through engagement with organizations such as the WWF
- Update our leather supply chain mapping in 2023 (a process that is completed on a regular basis)
- Continue to collect additional supply chain data by working with suppliers, as well as through the introduction of further contractual requirements on sustainable leather procurement in our supplier selection and contracting processes
- Increase our engagement with LWG and contribute to reviewing and updating the Chain of Custody system, with the aim of supporting its relevance

<sup>&</sup>lt;sup>20</sup> The leather specification sheet contains a list of high-risk countries. These countries have been categorized as high risk based on studies done by the WWF.

## **MICA**

### **KEY APPLICATION**



### **RISK ASSESSMENT**

For our risk assessment, we continue to focus on direct engagement with paint and battery suppliers in order to map the mica supply chain. We maintain our engagement with the RMI with the aim of advancing its third-party assurance protocol for mica supply chains. For more information on this initiative, see the box on the RMI overleaf.

Mica mining is an important livelihood for many people in countries such as India and Madagascar. However, some of these mining operations are deemed illegal in eastern India, while in certain parts of Madagascar, mining regulations are lacking. Moreover, because of the large number of stakeholders and dealers involved in the mica supply chain, only a limited amount of traceability data is currently available. In 2022, we continued to monitor and analyze media reports and research publications on industry risks on at least a quarterly basis. This approach helped us identify widescale human rights risks in micarich regions in India.

In 2022, with the introduction of our mica specification sheet, we finalized our contractual terms for mica suppliers that now include binding responsible sourcing requirements across our battery as well as our paint supply chains. We piloted the mica specification sheet with Porsche, Audi and Scania. The mica specification sheet implements RMI's requirements from the Global Workplace Standard for Mica Processors, transparency requirements<sup>21</sup> and further due diligence measures, such as unannounced audits and capacity-building at mine sites in cases where mica is sourced from a high-risk region.

### **RISK MITIGATION**

Direct stakeholder engagement is an important measure for mitigating risks in the mica supply chain. We participated in RMI's Community Empowerment programs, which included working with 180 villages in the Jharkhand and Bihar mica belt in India. These villages consist of communities that are highly dependent on mica for their livelihoods, have higher rates of illiteracy, are willing to work with the RMI and are located close to the mines and processing units that supply mica.

### KEY MATERIAL-SPECIFIC RISKS



Child labor



Modern slavery



Systematic or widespread human rights abuses associated with the extraction, transportation and trading of the raw material



Human rights abuses committed by public or private security forces



Risks to workers' occupational health and safety



Adverse environmental impacts

<sup>&</sup>lt;sup>21</sup> The specification sheet requires disclosure from the mine site down to the processor, as well as disclosure of the raw material's country of origin.

Through a multi-stakeholder workshop, which was held by the RMI and included international organizations, local NGOs, geologists, local mica businesses and the local government, we sought to incentivize people living in these villages to mine mica sustainably and, in turn, to make a living from their activities. We also engaged with the local government to help contribute towards strengthening and making additions to legal frameworks with relevance for responsible mica mining.

We continued to support broader industry efforts to tackle health and safety and child labor issues through our engagement with the RMI.

As mica specification sheet requirements are relatively new, we have worked closely with our mica suppliers to ensure they are familiar with prevalent risks and how to mitigate them. For instance, we organized monthly check-in calls with our tier 1 and 2 suppliers of mica sheets.  $^{\rm 22}$ 

### **OUTLOOK 2023**

We plan to:

- Implement our mica specification sheet across the entire Volkswagen Group, including implementing its requirements in existing and upcoming automotive projects
- Further support the development and launch of the RMI's traceability system
- Expand our engagement with stakeholders in Madagascar and India, and continue to raise awareness about the RMI

### BOX 6

### PARTICIPATION IN THE RESPONSIBLE MICA INITIATIVE

In late 2020, we joined the RMI, a multi-stakeholder group promoting transparency and better working conditions in mica production. For more information on our work with the RMI in the past, please see our 2021 Responsible Raw Materials Report (page 28). In 2022, we:

- Engaged in the RMI's Community Empowerment programs with local villages (as discussed above)
- Participated online in a multi-stakeholder event held in Madagascar with the local government and NGOs to help local stakeholders become familiar with the RMI. We shared our own experience with the RMI and our expectations regarding the responsible sourcing of mica
- Participated in a multi-stakeholder workshop in India to incentivize the local community to mine mica sustainably and, subsequently, create opportunities for people
- Participated in the RMI legal framework program, which examined relevant local legal frameworks in mica-producing regions in India

 Participated in the technical committee on value distribution and a living wage run by the RMI. The main project of this committee was the commissioning of a study that defined a living wage for mica miners in India

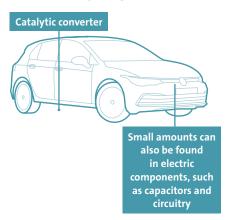
In December 2022, the Indian government announced it would formalize mica mining and then address issues related to working conditions. We plan to collaborate with the RMI and other stakeholders to advocate for a legal framework that requires fair labor conditions for mica miners in India.

Lastly, we supported the development and launch of the RMI's traceability system. This traceability tool collects data from various points in the supply chain using a decentralized network and is designed to simplify and increase mica supply chain traceability. Using blockchain technology, the tool facilitates the establishment of complete traceability data from end to end, while maintaining the confidentiality of individual member data. In 2022, we entered our mica supply chain data into this joint system.

<sup>22</sup> We nominate those suppliers that supply us with mica sheets.

## PLATINUM GROUP METALS (PGM)

### **KEY APPLICATION**



### KEY MATERIAL-SPECIFIC RISKS



Human rights abuses committed by public or private security forces



Risks to workers' occupational health and safety



Infringement of labor rights



Threats to indigenous people and communities

### **RISK ASSESSMENT**

Our risk assessment of the PGM supply chain is still ongoing. Since launching our PGM supply chain transparency efforts in 2020, we have made significant progress in collecting supplier information and improving data-sharing among actors along the PGM supply chain. However, owing to the complexity of PGM supply chains, especially at the refiner and processor level, we cannot yet establish transparency up to the mining level.

Moreover, some of the mining companies involved in PGM were reluctant to follow the joint audit approach of the International Platinum Group Metals Association (IPA), which is discussed below. However, we continued to work on aligning ourselves with fabricators, mining companies and the PGM industry as a whole to build support for a common audit approach.

We plan to collect further data and enhance our engagement with various supply chain actors, such as traders and intermediaries, to address this challenge, focusing specifically on the PGM mining sector in South Africa.

### **RISK MITIGATION**

In 2022, the Volkswagen Group organized several online meetings with mining companies, fabricators and industry initiatives to promote responsible mining practices and encourage transparency in PGM supply chains. We specifically focused on providing information to companies along the PGM supply chain about the IRMA standard and creating awareness about regulatory developments in the European Union.

The Volkswagen Group actively engaged in dialogue with IPA members on sector-wide risk mitigation efforts. The efforts discussed included a joint audit approach that was agreed on in 2019 by IPA members as well as relevant automotive actors, including Scania (a Volkswagen Group brand) and the Volkswagen Group. We also focused on promoting higher transparency levels through the IRMA initiative.

We made use of information from the London Platinum and Palladium Market (LPPM). The LPPM has a list of approved refiners and assayers that have been found to meet the standard set out in the LPPM's Responsible Platinum and Palladium Guidance. In 2022, we were able to match some of the listed refiners with the refiners supplying some of our fabricators.

The Volkswagen Group also encouraged PGM mining companies in our supply chain to undergo or prepare to undergo an IRMA audit. So far, one of the mining companies has a mine that has achieved IRMA75, which means that it has met a set of critical requirements set out in the IRMA standard. Two other mine sites have begun the process of becoming IRMA-certified.

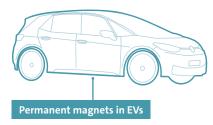
### **OUTLOOK 2023**

We plan to:

- Continue to engage with relevant actors and encourage mining companies to meet the IRMA standard and become IRMAcertified
- Continue our dialogue with relevant industry associations for PGM and continue to engage with our PGM suppliers, including those beyond tier 1
- Engage in dialogue with affected stakeholders, prioritizing stakeholders in South Africa
- Find out whether there are any relevant local initiatives or collaborations we could join to help address the root causes of the severe risks related to PGM mining
- Create a sustainability specification sheet for PGM

## RARE EARTH ELEMENTS (REE)

### **KEY APPLICATION**



### **RISK ASSESSMENT**

In combination with our Human Rights Focus System (HRFS), which is part of the overall ReSC system (discussed on page 10) and runs in parallel to our RMDDMS, the Volkswagen Group evaluates country risks. Through this evaluation, we identified particular governance and compliance risks for REE that relate specifically to their countries of origin, which include issues such as corruption, a lack of respect for human rights and different views about the definition of human rights.

Our approach to risk identification in the REE supply chain continued to focus on engaging with various groups of stakeholders. In 2022, we actively engaged with and participated in the raw material working group of a Verband der Automobilindustrie (VDA), the German automotive industry association.

As part of the sub-working group on REE, we continued to take part in monthly meetings dedicated to discussing topics such as the REE value chain, supply and demand, new REE deposits, the EU strategy to strengthen European supply chains, REE sustainability risks, traceability challenges, responsible sourcing and sustainability, and strategies to secure REE at the national and EU level. <sup>23</sup>

Because of resource constraints, we undertook limited outreach to our direct REE suppliers and were unable to conduct extensive supply chain risk information gathering, such as through publicly available data or conversations with experts. Where we did reach out to our direct REE suppliers, the information we received relating to the upstream sector in some of our country-specific REE supply chains was significantly lacking. This was either because the suppliers did not have access to the relevant information or because the suppliers were reluctant to disclose certain information. This has resulted in limited visibility into our REE supply chain. We recognize that we are not the only downstream company to experience this aspect of disclosure from country-specific suppliers.

### KEY MATERIAL-SPECIFIC RISKS



Child labor



Modern slavery



Systematic or widespread human rights abuses associated with the extraction, transportation and trading of the raw material



Human rights abuses committed by public or private security forces



Direct or indirect support to non-state armed groups or public or private security forces



Risks to workers' occupational health and safety



Adverse environmental impacts



Infringement of labor rights



Discrimination and harassment, including against vulnerable groups

<sup>&</sup>lt;sup>23</sup> These meetings and discussions take place in accordance with antitrust regulations.

This issue is common among downstream companies, and we are seeking to address it through dialogue with associations such as the VDA and the Federal Institute for Geosciences and Natural Resources (Bundesanstalt für Geowissenschaften und Rohstoffe – BGR) as well as with audit service providers.

The information on REE available in the Raw Material Outlook (discussed on page 24 of this report) was updated in 2022.

### **RISK MITIGATION**

A limited number of countries currently produce REE, and not all of them provide sufficient information about the environmental and social risks associated with REE mining and refining.

In view of this challenge, we extended the focus of our conversations in the VDA sub-working group to include economic factors, issues relating to responsible business conduct, and standards and certification for REE sourcing. We also discussed ways in which the German automotive industry has been able to reduce dependency on sourcing from countries that do not share supply chain information. We engaged with the VDA to commission research regarding the REE market (supply and demand), carbon emissions emanating from REE processing, future REE deposits, and REE sustainability certification schemes and standards and how they compare.

From this engagement, we entered into the German–Chinese Pilot Project for Sustainability Requirements in the Chinese Rare Earth Supply Chain, led by BGR and the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC).

The project aims to promote exchanges between German and Chinese industry actors regarding sustainability in the REE supply chain, and to establish a common understanding about our expectations on sustainability in an automotive supply chain. We also aimed to increase trust between the different country suppliers and improve overall transparency across our REE supply chains. However, the pilot project has experienced considerable challenges along the way and we were unable to achieve our goals on visibility into the supply chain. In 2023, we will continue to monitor the progress of the pilot project and will reassess our actions should these challenges persist.

We are still collecting data on the Volkswagen Group's REE supply chain, and our risk assessment and mitigation activities so far have mainly focused on wider REE industry analysis and stakeholder engagement.

### **OUTLOOK 2023**

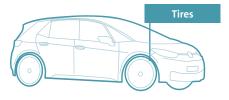
### We plan to:

- Continue increasing data collection on our REE supply chain and expand direct engagement with these suppliers
- Continue to engage with the BGR-CCCMC pilot project
- Offer more supplier workshops and dialogue opportunities and, more generally, increase our efforts in REE supply chain mapping

### **VOLKSWAGEN GROUP**

### NATURAL RUBBER

#### **KEY APPLICATION**



#### **RISK ASSESSMENT**

In 2022, we continued to gather rubber supplier information through our supply chain mapping questionnaire and have further completed mapping of our rubber supply chain. So far, we have identified over 650 business actors in our natural rubber supply chain, achieving visibility up to tier 4.

In 2021, we piloted a systematic risk assessment using the Maplecroft Global Risk Dashboard (Maplecroft GriD), a global risk intelligence tool that incorporates responsible sourcing risk data. In 2022, we integrated information based on the natural rubber risk index<sup>24</sup> into the Maplecroft GriD, which helped us to identify and understand relevant risks. We implemented our developed risk index on supply chain mapping data to get a clear overview of risks in our supply chain. We used color codes to analyze various risk levels and to establish a clear visual picture. To further understand risks in this supply chain, we continued to conduct media monitoring and reviewed relevant research publications to gain insight into industry-specific risks. We also reviewed grievance mechanism cases related to our natural rubber supply chain.

#### **RISK MITIGATION**

In 2022, we continued to run responsible sourcing workshops with tier 1 suppliers. We also continued to engage with international environmental NGOs, industry associations and affected communities regarding risks in the natural rubber supply chain, as follows:

• Through Porsche AG, we continued to be part of the CASCADE project, a community project in Indonesia that supports local rubber producers and seeks to address responsible sourcing issues on the ground. The project also includes a five-year community engagement program, which involves training local farmers to help them increase their yield and income. By the end of 2022, some 571 farmers had been trained. These farmers were then asked to complete a survey, which indicated that 87 percent of the trained farmers increased their yield and income, while 83 percent were satisfied with the training. For more information on the CASCADE project, see our 2021 Responsible Raw Materials Report (page 31).

#### KEY MATERIAL-SPECIFIC RISKS



Child labor



Modern slavery



Risks to workers' occupational health and safety



Adverse environmental impacts



Infringement of labor rights



Discrimination and harassment, including against vulnerable groups



Threats to indigenous people and communities

<sup>&</sup>lt;sup>24</sup> We did this by taking specific key performance indicators (KPIs) linked to risks in the natural rubber supply chain, allocating them to specific risk categories, such as environmental impacts and child labor, and weighted the different categories. The result of this was the natural rubber risk index. The index is accessible within the Volkswagen Group expert network.

### **VOLKSWAGEN GROUP**

• We remained a member of the Global Platform for Sustainable Natural Rubber (GPSNR), a multi-stakeholder organization focused on enabling responsible sourcing and defining a sustainability framework for the natural rubber sector. In 2022, as a member of the working group on the Shared Responsibility Framework, we continued to support its development. We continue to adhere to GPSNR reporting requirements for members, which we began in 2021.

#### **OUTLOOK 2023**

We plan to:

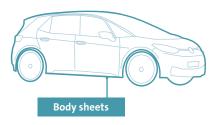
- Improve our efforts around risk mitigation
- Create a sustainability specification sheet for rubber
- Work on implementing industry standards relating to natural rubber
- Continue to actively participate in the GPSNR to help improve sustainability efforts around the natural rubber supply chain
- Continue supporting our project on innovative tracing technologies and their applicability in the natural rubber value chain, which we established in 2021
- Together with relevant stakeholders, continue reviewing opportunities to develop a more sustainable tire by exploring secondary and renewable materials, as well as natural rubber substitutes



### **VOLKSWAGEN GROUP**

### STEEL

#### **KEY APPLICATION**



#### **RISK ASSESSMENT**

Our risk assessment activities have remained the same as those disclosed in our 2021 Responsible Raw Materials Report (page 27), which include gathering risk information, and undertaking workshops with major steel suppliers to request supply chain mapping information and promote third-party-assured products and mine sites.

Several raw materials used for steel production, such as iron ore, graphite, nickel and molybdenum, are included in the Raw Material Outlook (discussed on page 24 of this report), which was updated in 2022.

#### **RISK MITIGATION**

We are continuing our outreach to our steel suppliers in order to leverage their influence for risk mitigation along the steel supply chain.

A number of our steel suppliers joined the Responsible Steel initiative in 2022.

#### **OUTLOOK 2023**

#### We plan to:

- Continue analyzing the risk assessment data from the Raw Material Outlook
- Continue engaging with our steel suppliers and relevant industry initiatives
- · Create a sustainability specification sheet for steel
- Build our internal capacity in order to increase our sustainability activities around steel

#### KEY MATERIAL-SPECIFIC RISKS



Risks to workers' occupational health and safety



Adverse environmental impacts



Infringement of labor rights



Discrimination and harassment, including against vulnerable groups



Threats to indigenous people and communities

### 5 LIMITATIONS

This is the third year that we have implemented our RMDDMS. Over the course of the reporting period, we made improvements across the individual raw materials and took steps to strengthen the management system itself. While we were pleased with our progress, we encountered several obstacles along the way. We describe these challenges in this section..

# LIMITED RESPONSIBLE SOURCING MATURITY AMONG SUPPLIER GROUPS

Through our battery materials mapping and auditing program, we continued to conduct audits of various suppliers against the 5-Step Framework of the OECD Minerals Guidance. While many of our suppliers demonstrate an openness to adopt the OECD framework, we have observed that some still struggle to identify and mitigate risks in their supply chain. We found that many of our suppliers require close monitoring and support, particularly those with which we do not have a direct contractual relationship. Actors in our supply chain often lack awareness about the human rights and environmental risks that exist in the supply chain and are not aware of international standards such as the OECD Minerals Guidance.

We have observed that midstream suppliers in particular face challenges to develop this awareness. The reasons for this vary. Sometimes, it is due to the complexity of guidance regarding responsible sourcing. Midstream supply chain actors are also frequently isolated somewhat from both the upstream and the downstream, which can make it harder for them to understand their relationship to human rights and environmental risks. Appropriate management attention to responsible sourcing practices can help ensure sufficient resources are allocated for the implementation of responsible sourcing. This can positively affect the number, qualifications and internal influence of staff in charge of responsible sourcing.

In line with the OECD Minerals Guidance, we are committed to establishing relationships and building supplier capacity for responsible sourcing. We believe that a more unified approach across the automotive sector towards responsible sourcing along the entire supply chain can help align our expectations and increase leverage and collaboration with midstream suppliers. In an attempt to address the issues mentioned above, we will focus on continuing our engagement with industry initiatives, direct suppliers and actors along the supply chain.

# CHALLENGES TO ESTABLISH SUPPLY CHAIN TRANSPARENCY

For selected high-risk raw materials, we continued to work towards greater transparency in our supply chains beyond our direct suppliers. We found that, in some cases, suppliers were resistant to disclosing the identity of their suppliers because of antitrust and competition concerns.

Moreover, as supply chains are complex and ever-changing, we need to regularly increase our efforts and resources to establish transparency in our supply chain.

#### ISSUES BEYOND OUR SOLE CONTROL

Some of the challenges we faced were beyond our sole control. As set out in the UN Guiding Principles on Business and Human Rights, states have a duty to protect human rights, while business enterprises have a responsibility to respect human rights. To create an enabling environment for responsible business conduct, governments play a key role in issues such as ensuring good governance (for example, combating bribery and corruption), enacting and enforcing relevant legal frameworks, and ensuring that human rights are not violated through the deployment of state security forces. However, we do recognize the complexities for governments in ensuring human rights and environmental protection. One example of these complexities that are relevant for our sector can be seen in the context of protecting and respecting human rights in artisanal and small-scale mining.

# RECOGNIZING THE LIMITATIONS OF WHERE WE ARE IN OUR DUE DILIGENCE PROCESS

Due diligence systems can require significant resource investment and learning for all businesses, including ours, especially in the first years of implementation. This is particularly the case with due diligence systems like ours that try to address risks across many tiers of long and complicated supply chains, where the business, such as the Volkswagen Group, does not have contractual relationships with each and every actor in the supply chain. In our initial years of implementing our due diligence system, we have focused on increasing transparency, using audits and requiring certification. However, these approaches are still relatively new to us and our suppliers and we are learning as we go along. Based on our findings of what is working in our due diligence, we are adapting and improving our due diligence measures.

In the future, as we shift our focus to more comprehensive risk assessment and risk mitigation, we will be able to demonstrate more measurable positive outcomes for human rights and the environment as a result of longer-term initiatives and investments that take some time to yield results.

#### LACK OF AN INTERNATIONAL LEVEL PLAYING FIELD

Although regulations on business and human rights at the EU and European national level are being increasingly tightened, legal requirements for businesses in many other geographies are not developing in the same way. This creates a challenge given that raw materials supply chains are global, and downstream companies are unable to address risks much further up the supply chain by themselves. This regulatory imbalance can only be addressed through close collaboration between businesses in various jurisdictions, as well as measures aimed at creating an international level playing field.

# RESOURCES REQUIRED FOR REGULATORY COMPLIANCE

In 2022, we spent a significant amount of time and effort reviewing our existing processes and systems and assessing them against the requirements of the new German Supply Chain Due Diligence Act and other upcoming due diligence regulations.

While we believe regulations are essential to ensure responsibility and sustainability across supply chains, we would welcome efforts to harmonize new due diligence regulations. Harmonizing regulations and ensuring their alignment with current global normative frameworks, with existing wide acceptance and implementation, would help make regulatory compliance more efficient, thereby enabling businesses to focus their resources on risk assessment and mitigation.

# ON-THE-GROUND ASSESSMENTS AND IN-PERSON SUPPLIER ENGAGEMENT PREVENTED BY TRAVEL RESTRICTIONS

On-the-ground assessments and in-person supplier engagement are essential aspects of our RMDDMS methodology for cooperation along the supply chains and to verify that suppliers conform to our responsible sourcing requirements. In 2022, owing to continuing COVID-19-related global travel restrictions, we were again limited in our ability to arrange for our suppliers to undergo on-site audits. In some instances, we were unable to meet in person for direct supplier engagement and supplier training.

### 6 OUTLOOK FOR 2023

We are highly motivated to strengthen our due diligence efforts in 2023. We plan to continue efforts to increase the positive impact of our RMDDMS by focusing on the following additional priorities:

#### **RAW MATERIAL SPECIFIC OUTLOOK:**

We provide an in-depth outlook for 2023 for our 16 priority raw materials in Section 4 of this report.

# ADHERING TO INCREASING REGULATORY REQUIREMENTS

- (i) German Supply Chain Due Diligence Act: The Act came into force on January 1, 2023, imposing new obligations on companies regarding human rights across supply chains. As outlined in this report, we prepared for compliance with this Act in 2022.
- (ii) Preparation for the EU Battery Regulation: The EU Commission presented a proposal for a new regulation on batteries and waste batteries on December 10, 2020, which will replace the existing Batteries Directive dating from 2006. This proposal 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 European Parliament approved the new rules on June 14, 2023. The Council must now formally endorse the text before its publication in the Official Journal of the European Union shortly afterwards, and its entry into force.
  - The Volkswagen Group is analyzing legal developments relating to batteries to gain a better understanding of what requirements are likely to be included. We believe this will help us set out a common understanding of legal requirements with our suppliers, as well as for the industry as a whole.

- We feel it is important for the final text of the Battery Regulation to allow a risk-based approach to risk management in battery value chains. Given the size of these value chains, we believe businesses should be able to prioritize which risks they address first, based on the severity of risk to people and the environment. This approach is in line with global normative frameworks such as the UN Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises.
- In 2022, we started work on aligning our RMDDMS to the new proposed EU Battery Regulation, focusing on the risk-based approach. The Volkswagen Group carried out a gap analysis to identify working packages and will continue our work in 2023.
- (iii) EU Deforestation-Free Regulation: The EU Deforestation-Free Regulation (EUDR), approved on December 6, 2022, impacts seven specific commodities, including leather. The EUDR will require any company importing or exporting these commodities into or out of the EU to prove that the products are not linked to deforestation. The Volkswagen Group will analyze the EUDR and take it into consideration to refine our own due diligence approach, particularly for leather and natural rubber.

# INCREASING INTERNAL RESOURCES AND CAPACITY FOR RESPONSIBLE SOURCING

In 2023, we look forward to further increasing and enhancing our capacity for human rights due diligence in our raw materials supply chains. To this end, we plan to increase the size of our working group on raw materials and to continue to organize regular capacity-building activities and internal training.

## **ANNEX I: LIST OF ABBREVIATIONS**

3TG	tin, tantalum, tungsten and gold
Al	artificial intelligence
ASI	Aluminium Stewardship Initiative
ASM	artisanal and small-scale mining
BEV	battery electric vehicle
BGR	Bundesanstalt für Geowissenschaften und Rohstoffe
C4D	Cobalt for Development
CAP	corrective action plan
CASCADE	Committed Actions for Smallholders Capacity Development
CCCMC	China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters
CERA	Certification of Raw Materials
CMRT	Conflict Minerals Reporting Template
DRC	Democratic Republic of the Congo
EU	European Union
EUDR	EU Deforestation-Free Regulation
EV	electric vehicle
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GPSNR	Global Platform for Sustainable Natural Rubber
HRFS	Human Rights Focus System
IPA	International Platinum Group Metals Association
IRMA	Initiative for Responsible Mining Assurance
KPI	key performance indicator
LPPM	London Platinum and Palladium Market
LSM	large-scale mining
LWG	Leather Working Group
Maplecroft GriD	Maplecroft Global Risk Dashboard
NGO	non-governmental organization
OECD	Organisation for Economic Co-operation and Development
OEM	original equipment manufacturer
OHS	occupational health and safety
PGM	platinum group metals
PHEV	plug-in hybrid electric vehicle
REE	rare earth elements
ReSC system	Responsible Supply Chain system
RMAP	Responsible Minerals Assurance Process
RMDDMS	Raw Materials Due Diligence Management System
RMI	Responsible Mica Initiative
RMI	Responsible Minerals Initiative
UN	United Nations
VDA	Verband der Automobilindustrie
VDM	Verband Deutscher Metallhändler und Recycler
WWF	World Wide Fund for Nature

### ANNEX II: LIST OF INITIATIVES AND ASSOCIATIONS

The Volkswagen Group, either as a Group or as individual brands, participates in numerous initiatives and associations with relevance for the responsible sourcing of raw materials. These include:

Advisory board of the Certification of Raw Materials (CERA)	
Aluminium Stewardship Initiative (ASI)	
CASCADE project	
Cobalt for Development (C4D)	
The Copper Mark	
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)	
Raw Material Working Group of the Verband der Automobilindustrie (VDA)	
Responsible Lithium Partnership	
Responsible Mica Initiative (RMI)	
Responsible Minerals Initiative (RMI)	
Swedish Leadership for Sustainable Development	
Teknikföretagen (Association of Swedish Engineering Industries)	

## **ANNEX III: LIST OF 3TG SMELTERS**

Metal	Smelter name	RMI ID
Gold	Advanced Chemical Company	CID000015
Gold	Aida Chemical Industries Co., Ltd.	CID000019
Gold	Agosi AG	CID000035
Gold	Almalyk Mining and Metallurgical Complex (AMMC)	CID000041
Gold	AngloGold Ashanti Corrego do Sitio Mineracao	CID000058
Gold	Argor-Heraeus S.A.	CID000077
Gold	Asahi Pretec Corp.	CID000082
Gold	Asaka Riken Co., Ltd.	CID000090
Gold	Atasay Kuyumculuk Sanayi Ve Ticaret A.S.	CID000103
Gold	Aurubis AG	CID000113
Gold	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)	CID000128
Gold	Boliden AB	CID000157
Gold	C. Hafner GmbH + Co. KG	CID000176
Gold	Caridad	CID000180
Gold	CCR Refinery - Glencore Canada Corporation	CID000185
Gold	Cendres + Metaux S.A.	CID000189
Gold	Yunnan Copper Industry Co., Ltd.	CID000197
Gold	Chimet S.p.A.	CID000233
Gold	Chugai Mining	CID000264
Gold	Daye Non-Ferrous Metals Mining Ltd.	CID000343
Gold	DSC (Do Sung Corporation)	CID000359
Gold	Dowa	CID000401
Gold	Eco-System Recycling Co., Ltd. East Plant	CID000425
Gold	JSC Novosibirsk Refinery	CID000423
Gold	Refinery of Seemine Gold Co., Ltd.	CID000433
Gold	Guoda Safina High-Tech Environmental Refinery Co., Ltd.	CID000651
Gold	Hangzhou Fuchunjiang Smelting Co., Ltd.	CID000671
Gold	LT Metal Ltd.	CID000689
Gold	Heimerle + Meule GmbH	CID000694
Gold	Heraeus Metals Hong Kong Ltd.	CID000707
Gold	Heraeus Germany GmbH Co. KG	CID000707
Gold	Hunan Chenzhou Mining Co., Ltd.	CID000711
Gold	Hunan Guiyang yinxing Nonferrous Smelting Co., Ltd.	CID000767
Gold	HwaSeong CJ CO., LTD.	CID000778
Gold	Inner Mongolia Qiankun Gold and Silver Refinery Share Co., Ltd.	CID000801
Gold	Ishifuku Metal Industry Co., Ltd.	CID000807
Gold	Istanbul Gold Refinery	CID000814
Gold	Japan Mint	CID000823
Gold	Jiangxi Copper Co., Ltd.	CID000855
Gold	Asahi Refining USA Inc.	CID000930
Gold	Asahi Refining Canada Ltd.	CID000924
Gold	JSC Ekaterinburg Non-Ferrous Metal Processing Plant	CID000927
Gold	JSC Uralelectromed	CID000929
Gold	JX Nippon Mining & Metals Co., Ltd.	CID000937

Metal	Smelter name	RMI ID
Gold	Kazakhmys Smelting LLC	CID000956
Gold	Kazzinc	CID000957
Gold	Kennecott Utah Copper LLC	CID000969
Gold	Kojima Chemicals Co., Ltd.	CID000981
Gold	Kyrgyzaltyn JSC	CID001029
Gold	L'azurde Company For Jewelry	CID001032
Gold	Lingbao Gold Co., Ltd.	CID001056
Gold	Lingbao Jinyuan Tonghui Refinery Co., Ltd.	CID001058
Gold	LS-NIKKO Copper Inc.	CID001078
Gold	Luoyang Zijin Yinhui Gold Refinery Co., Ltd.	CID001093
Gold	Materion	CID001113
Gold	Matsuda Sangyo Co., Ltd.	CID001119
Gold	Metalor Technologies (Suzhou) Ltd.	CID001147
Gold	Metalor Technologies (Hong Kong) Ltd.	CID001149
Gold	Metalor Technologies (Singapore) Pte., Ltd.	CID001152
Gold	Metalor Technologies S.A.	CID001153
Gold	Metalor USA Refining Corporation	CID001157
Gold	Metalurgica Met-Mex Penoles S.A. De C.V.	CID001161
Gold	Mitsubishi Materials Corporation	CID001188
Gold	Mitsui Mining and Smelting Co., Ltd.	CID001193
Gold	Moscow Special Alloys Processing Plant	CID001204
Gold	Nadir Metal Rafineri San. Ve Tic. A.S.	CID001220
Gold	Navoi Mining and Metallurgical Combinat	CID001236
Gold	Nihon Material Co., Ltd.	CID001259
Gold	Ohura Precious Metal Industry Co., Ltd.	CID001325
Gold	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC Krastsvetmet)	CID001326
Gold	MKS PAMP SA	CID001352
Gold	Penglai Penggang Gold Industry Co., Ltd.	CID001362
Gold	Prioksky Plant of Non-Ferrous Metals	CID001386
Gold	PT Aneka Tambang (Persero) Tbk	CID001397
Gold	PX Precinox S.A.	CID001498
Gold	Rand Refinery (Pty) Ltd.	CID001512
Gold	Royal Canadian Mint	CID001534
Gold	Sabin Metal Corp.	CID001546
Gold	Samduck Precious Metals	CID001555
Gold	Samwon Metals Corp.	CID001562
Gold	SEMPSA Joyeria Plateria S.A.	CID001585
Gold	Shandong Tiancheng Biological Gold Industrial Co., Ltd.	CID001619
Gold	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.	CID001622
Gold	Sichuan Tianze Precious Metals Co., Ltd.	CID001736
Gold	SOE Shyolkovsky Factory of Secondary Precious Metals	CID001756
Gold	Solar Applied Materials Technology Corp.	CID001761
Gold	Sumitomo Metal Mining Co., Ltd.	CID001798
Gold	Super Dragon Technology Co., Ltd.	CID001810
Gold	Tanaka Kikinzoku Kogyo K.K.	CID001875
Gold	Great Wall Precious Metals Co., Ltd. of CBPM	CID001909

Metal	Smelter name	RMIID
Gold	Shandong Gold Smelting Co., Ltd.	CID001916
Gold	Tokuriki Honten Co., Ltd.	CID001938
Gold	Tongling Nonferrous Metals Group Co., Ltd.	CID001947
Gold	Torecom	CID001955
Gold	Umicore S.A. Business Unit Precious Metals Refining	CID001980
Gold	United Precious Metal Refining, Inc.	CID001993
Gold	Valcambi S.A.	CID002003
Gold	Western Australian Mint (T/a The Perth Mint)	CID002030
Gold	Yamakin Co., Ltd.	CID002100
Gold	Yokohama Metal Co., Ltd.	CID002129
Gold	Zhongyuan Gold Smelter of Zhongjin Gold Corporation	CID002224
Gold	Gold Refinery of Zijin Mining Group Co., Ltd.	CID002243
Gold	Morris and Watson	CID002282
Gold	SAFINA A.S.	CID002290
Gold	Guangdong Jinding Gold Limited	CID002312
Gold	Umicore Precious Metals Thailand	CID002314
Gold	Geib Refining Corporation	CID002459
Gold	MMTC-PAMP India Pvt., Ltd.	CID002509
Gold	KGHM Polska Miedz Spolka Akcyjna	CID002511
Gold	Fidelity Printers and Refiners Ltd.	CID002515
Gold	Singway Technology Co., Ltd.	CID002516
Gold	Shandong Humon Smelting Co., Ltd.	CID002525
Gold	Shenzhen Zhonghenglong Real Industry Co., Ltd.	CID002527
Gold	Al Etihad Gold Refinery DMCC	CID002560
Gold	Emirates Gold DMCC	CID002561
Gold	International Precious Metal Refiners	CID002562
Gold	Kaloti Precious Metals	CID002563
Gold	Sudan Gold Refinery	CID002567
Gold	T.C.A S.p.A	CID002580
Gold	REMONDIS PMR B.V.	CID002582
Gold	Fujairah Gold FZC	CID002584
Gold	Industrial Refining Company	CID002587
Gold	Shirpur Gold Refinery Ltd.	CID002588
Gold	Korea Zinc Co., Ltd.	CID002605
Gold	Marsam Metals	CID002606
Gold	TOO Tau-Ken-Altyn	CID002615
Gold	Abington Reldan Metals, LLC	CID002708
Gold	Shenzhen CuiLu Gold Co., Ltd.	CID002750
Gold	SAAMP	CID002761
Gold	L'Orfebre S.A.	CID002762
Gold	8853 S.p.A.	CID002763
Gold	Italpreziosi	CID002765
Gold	WIELAND Edelmetalle GmbH	CID002778
Gold	Ogussa Osterreichische Gold- und Silber-Scheideanstalt GmbH	CID002779
Gold	AU Traders and Refiners	CID002850
Gold	GGC Gujrat Gold Centre Pvt. Ltd.	CID002852
Gold	Sai Refinery	CID002853
Gold	Modeltech Sdn Bhd	CID002857
Gold	Bangalore Refinery	CID002863
Gold	Kyshtym Copper-Electrolytic Plant ZAO	CID002865
Gold	Degussa Sonne / Mond Goldhandel GmbH	CID002867

M-4-1	Consider or one	DAGUE
Metal	Smelter name	RMI ID
Gold	Pease & Curren	CID002872
Gold	JALAN & Company	CID002893
Gold	SungEel HiMetal Co., Ltd.	CID002918
Gold	Planta Recuperadora de Metales SpA	CID002919
Gold	ABC Refinery Pty Ltd.	CID002920
Gold	Safimet S.p.A	CID002973
Gold	State Research Institute Center for Physical Sciences and Technology	CID003153
Gold	African Gold Refinery	CID003185
Gold	Gold Coast Refinery	CID003186
Gold	NH Recytech Company	CID003189
Gold	QG Refining, LLC	CID003324
Gold	Dijllah Gold Refinery FZC	CID003348
Gold	CGR Metalloys Pvt Ltd.	CID003382
Gold	Sovereign Metals	CID003383
Gold	C.I Metales Procesados Industriales SAS	CID003421
Gold	Eco-System Recycling Co., Ltd. North Plant	CID003424
Gold	Eco-System Recycling Co., Ltd. West Plant	CID003425
Gold	Augmont Enterprises Private Limited	CID003461
Gold	Kundan Care Products Ltd.	CID003463
Gold	Emerald Jewel Industry India Limited (Unit 1)	CID003487
Gold	Emerald Jewel Industry India Limited (Unit 2)	CID003488
Gold	Emerald Jewel Industry India Limited (Unit 3)	CID003489
Gold	Emerald Jewel Industry India Limited (Unit 4)	CID003490
Gold	K.A. Rasmussen	CID003497
Gold	Alexy Metals	CID003500
Gold	Sancus ZFS (L'Orfebre, SA)	CID003529
Gold	Sellem Industries Ltd.	CID003540
Gold	MD Overseas	CID003548
Gold	Metallix Refining Inc.	CID003557
Gold	Metal Concentrators SA (Pty) Ltd.	CID003575
Gold	WEEEREFINING	CID003615
Gold	Gold by Gold Colombia	CID003641
Gold	Dongwu Gold Group	CID003663
Gold	Albino Mountinho Lda.	CID002760
Tantalum	F&X Electro-Materials Ltd.	CID000460
Tantalum	XIMEI RESOURCES (GUANGDONG) LIMITED	CID000616
antalum	JiuJiang JinXin Nonferrous Metals Co., Ltd.	CID000914
antalum	Jiujiang Tanbre Co., Ltd.	CID000917
īantalum	AMG Brasil	CID001076
	Metallurgical Products India Pvt., Ltd.	CID001163
	Mineracao Taboca S.A.	CID001175
	Mitsui Mining and Smelting Co., Ltd.	CID001192
antalum	NPM Silmet AS	CID001200
antalum	Ningxia Orient Tantalum Industry Co., Ltd.	CID001277
antalum	QuantumClean	CID001277
Tantalum	Yanling Jincheng Tantalum & Niobium Co., Ltd.	CID001522
		CID001769
	SOURGIUSK Magnesium works DAD	
Tantalum Tantalum	Solikamsk Magnesium Works OAO  Taki Chemical Co Ltd.	CID001869
Fantalum Fantalum Fantalum	Taki Chemical Co., Ltd. Telex Metals	CID001869 CID001891

Co., Ltd.  Tantalum D Block Metals, LLC CIDG  Tantalum FIR Metals & Resource Ltd. CIDG  Tantalum Jiujiang Zhongao Tantalum & Niobium Co., Ltd.  Tantalum XinXing HaoRong Electronic Material Co., Ltd.  Tantalum Jiangxi Dinghai Tantalum & Niobium Co., Ltd.  Tantalum KEMET de Mexico CIDG  Tantalum TANIOBIS Co., Ltd. CIDG  Tantalum TANIOBIS GmbH CIDG  Tantalum Materion Newton Inc. CIDG  Tantalum TANIOBIS Smelting GmbH & Co. KG CIDG  Tantalum Global Advanced Metals Boyertown CIDG  Tantalum Global Advanced Metals Aizu CIDG  Tantalum Resind Industria e Comercio Ltda. CIDG  Tantalum Jiangxi Tuohong New Raw Material CIDG  Tantalum RFH Yancheng Jinye New Material CIDG  Tantalum SD Production OU CIDG  Tantalum SID Production OU CIDG  Tantalum SD Production OU CIDG  Tantalum SD Production OU CIDG  Tantalum SID Production OU CIDG  Tantalum SD Production OU CIDG  Tantalum SD Production OU CIDG  Tantalum SID Production OU CIDG  T	002504 002505 002506 002508 002512 002539 002544 002545 002548 002549 002550 002557
Tantalum FIR Metals & Resource Ltd. CIDG  Tantalum Jiujiang Zhongao Tantalum & Niobium Co., Ltd.  Tantalum XinXing HaoRong Electronic Material Co., Ltd.  Tantalum Jiangxi Dinghai Tantalum & Niobium Co., Ltd.  Tantalum KEMET de Mexico CIDG  Tantalum TANIOBIS Co., Ltd. CIDG  Tantalum TANIOBIS GmbH CIDG  Tantalum TANIOBIS Japan Co., Ltd. CIDG  Tantalum TANIOBIS Smelting GmbH & Co. KG CIDG  Tantalum Global Advanced Metals Boyertown CIDG  Tantalum Global Advanced Metals Aizu CIDG  Tantalum Resind Industria e Comercio Ltda. CIDG  Tantalum Jiangxi Tuohong New Raw Material CIDG  Tantalum RFH Yancheng Jinye New Material CIDG  Tantalum SD Production OU CIDG  Tantalum SID Production OU CIDG  Tantalum	002505 002506 002508 002512 002539 002544 002545 002548 002549 002550 002557
Tantalum Jiujiang Zhongao Tantalum & Niobium Co., Ltd.  Tantalum XinXing HaoRong Electronic Material Co., Ltd.  Tantalum Jiangxi Dinghai Tantalum & Niobium Co., Ltd.  Tantalum KEMET de Mexico CIDG Tantalum TANIOBIS Co., Ltd. CIDG Tantalum TANIOBIS GmbH CIDG Tantalum TANIOBIS Japan Co., Ltd. CIDG Tantalum TANIOBIS Smelting GmbH & Co. KG CIDG Tantalum TANIOBIS Smelting GmbH & Co. KG CIDG Tantalum Global Advanced Metals Boyertown CIDG Tantalum Global Advanced Metals Aizu CIDG Tantalum Resind Industria e Comercio Ltda. CIDG Tantalum Jiangxi Tuohong New Raw Material CIDG Tantalum RFH Yancheng Jinye New Material CIDG Tantalum SD Production OU CIDG	002506 002508 002512 002539 002544 002545 002548 002549 002550 002557
Ltd.  Tantalum XinXing HaoRong Electronic Material Co., Ltd.  Tantalum Jiangxi Dinghai Tantalum & Niobium Co., Ltd.  Tantalum KEMET de Mexico CIDC Tantalum TANIOBIS Co., Ltd. CIDC Tantalum TANIOBIS GmbH CIDC Tantalum Materion Newton Inc. CIDC Tantalum TANIOBIS Japan Co., Ltd. CIDC Tantalum TANIOBIS Smelting GmbH & Co. KG CIDC Tantalum Global Advanced Metals Boyertown CIDC Tantalum Global Advanced Metals Aizu CIDC Tantalum Resind Industria e Comercio Ltda. CIDC Tantalum Jiangxi Tuohong New Raw Material CIDC Tantalum RFH Yancheng Jinye New Material CIDC Tantalum SD Production OU CIDC Tantalum SD Production OU CIDC	002508 002512 002539 002544 002545 002548 002549 002550 002557
Ltd.  Tantalum Jiangxi Dinghai Tantalum & Niobium Co., Ltd.  Tantalum KEMET de Mexico CIDO Tantalum TANIOBIS Co., Ltd. CIDO Tantalum TANIOBIS GmbH CIDO Tantalum Materion Newton Inc. CIDO Tantalum TANIOBIS Japan Co., Ltd. CIDO Tantalum TANIOBIS Smelting GmbH & Co. KG CIDO Tantalum Global Advanced Metals Boyertown CIDO Tantalum Global Advanced Metals Aizu CIDO Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material CIDO Tantalum SD Production OU CIDO Tantalum SD Production OU CIDO	002512 002539 002544 002545 002548 002549 002550 002557
Ltd.  Tantalum KEMET de Mexico CIDO  Tantalum TANIOBIS Co., Ltd.  Tantalum TANIOBIS GmbH CIDO  Tantalum Materion Newton Inc.  Tantalum TANIOBIS Japan Co., Ltd.  CIDO  Tantalum TANIOBIS Smelting GmbH & Co. KG CIDO  Tantalum Global Advanced Metals Boyertown CIDO  Tantalum Global Advanced Metals Aizu CIDO  Tantalum Resind Industria e Comercio Ltda. CIDO  Tantalum Jiangxi Tuohong New Raw Material CIDO  Tantalum RFH Yancheng Jinye New Material CIDO  Tantalum SD Production OU CIDO  Tantalum SD Production OU CIDO	002539 002544 002545 002548 002549 002550 002557
Tantalum TANIOBIS Co., Ltd. CIDO Tantalum TANIOBIS GmbH CIDO Tantalum Materion Newton Inc. CIDO Tantalum TANIOBIS Japan Co., Ltd. CIDO Tantalum TANIOBIS Smelting GmbH & Co. KG CIDO Tantalum Global Advanced Metals Boyertown CIDO Tantalum Global Advanced Metals Aizu CIDO Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material CIDO Tantalum SD Production OU CIDO Tantalum SD Production OU CIDO	002544 002545 002548 002549 002550 002557
Tantalum TANIOBIS GmbH CIDO Tantalum Materion Newton Inc. CIDO Tantalum TANIOBIS Japan Co., Ltd. CIDO Tantalum TANIOBIS Smelting GmbH & Co. KG CIDO Tantalum Global Advanced Metals Boyertown CIDO Tantalum Global Advanced Metals Aizu CIDO Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material CIDO Technology Co., Ltd. Tantalum 5D Production OU CIDO	002545 002548 002549 002550 002557
Tantalum Materion Newton Inc. CIDO Tantalum TANIOBIS Japan Co., Ltd. CIDO Tantalum TANIOBIS Smelting GmbH & Co. KG CIDO Tantalum Global Advanced Metals Boyertown CIDO Tantalum Global Advanced Metals Aizu CIDO Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material CIDO Tantalum SD Production OU CIDO Tantalum SD Production OU CIDO	002548 002549 002550 002557 002558
Tantalum TANIOBIS Japan Co., Ltd. CIDO Tantalum TANIOBIS Smelting GmbH & Co. KG CIDO Tantalum Global Advanced Metals Boyertown CIDO Tantalum Global Advanced Metals Aizu CIDO Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material CIDO Technology Co., Ltd. Tantalum 5D Production OU CIDO	002549 002550 002557 002558
Tantalum TANIOBIS Smelting GmbH & Co. KG CIDO Tantalum Global Advanced Metals Boyertown CIDO Tantalum Global Advanced Metals Aizu CIDO Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material CIDO Technology Co., Ltd. Tantalum 5D Production OU CIDO	002550 002557 002558
Tantalum Global Advanced Metals Boyertown CIDO Tantalum Global Advanced Metals Aizu CIDO Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material CIDO Technology Co., Ltd. Tantalum 5D Production OU CIDO	002557
Tantalum Global Advanced Metals Aizu CIDO Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material Technology Co., Ltd. Tantalum 5D Production OU CIDO	002558
Tantalum Resind Industria e Comercio Ltda. CIDO Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material Technology Co., Ltd. Tantalum 5D Production OU CIDO	
Tantalum Jiangxi Tuohong New Raw Material CIDO Tantalum RFH Yancheng Jinye New Material CIDO Technology Co., Ltd.  Tantalum 5D Production OU CIDO	102707
Tantalum RFH Yancheng Jinye New Material CIDO Technology Co., Ltd.  Tantalum 5D Production OU CIDO	102101
Technology Co., Ltd.  Tantalum 5D Production OU CIDO	002842
	003583
	003926
Tantalum PowerX Ltd. CID0	004054
Tin Chenzhou Yunxiang Mining and Metallurgy CID( Co., Ltd.	000228
Tin Alpha CIDO	000292
Tin PT Aries Kencana Sejahtera CIDO	000309
Tin Dowa CIDO	000402
Tin EM Vinto CIDO	000438
Tin Estanho de Rondonia S.A. CIDO	000448
Tin Fenix Metals CIDO	000468
Tin Gejiu Non-Ferrous Metal Processing Co., Ltd. CIDO	000538
· · · · · · · · · · · · · · · · · · ·	000555
	000942
	001070
· · · · · · · · · · · · · · · · · · ·	001105
, , ,	001142
· · · · · · · · · · · · · · · · · · ·	001173
	001173
	001191
<u> </u>	001231
	001231
	001303
	001314
	001337
	001399
	001402
<u> </u>	001406
	001428
	001453
	001457
	001458
	001460
Tin PT Sariwiguna Binasentosa CIDO	201462

Metal	Smelter name	RMI ID
Tin	PT Stanindo Inti Perkasa	CID001468
Tin	PT Timah Tbk Kundur	CID001477
Tin	PT Timah Tbk Mentok	CID001482
Tin	PT Timah Nusantara	CID001486
Tin	PT Tinindo Inter Nusa	CID001490
Tin	PT Tommy Utama	CID001493
Tin	Rui Da Hung	CID001539
Tin	Thaisarco	CID001898
Tin	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.	CID001908
Tin	VQB Mineral and Trading Group JSC	CID002015
Tin	White Solder Metalurgia e Mineracao Ltda.	CID002036
Tin	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.	CID002158
Tin	Tin Smelting Branch of Yunnan Tin Co., Ltd.	CID002180
Tin	CV Venus Inti Perkasa	CID002455
Tin	Magnu's Minerais Metais e Ligas Ltda.	CID002468
Tin	PT Tirus Putra Mandiri	CID002478
Tin	Melt Metais e Ligas S.A.	CID002500
Tin	PT ATD Makmur Mandiri Jaya	CID002503
Tin	O.M. Manufacturing Philippines, Inc.	CID002517
Tin	Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint Stock Company	CID002572
Tin	Nghe Tinh Non-Ferrous Metals Joint Stock Company	CID002573
Tin	Tuyen Quang Non-Ferrous Metals Joint Stock Company	CID002574
Tin	PT Cipta Persada Mulia	CID002696
Tin	An Vinh Joint Stock Mineral Processing Company	CID002703
Tin	Resind Industria e Comercio Ltda.	CID002706
Tin	Super Ligas	CID002756
Tin	Aurubis Beerse	CID002773
Tin	Aurubis Berango	CID002774
Tin	PT Sukses Inti Makmur	CID002816
Tin	PT Menara Cipta Mulia	CID002835
Tin	Modeltech Sdn Bhd	CID002858
Tin	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.	CID003116
Tin	Chifeng Dajingzi Tin Industry Co., Ltd.	CID003190
Tin	PT Bangka Serumpun	CID003205
Tin	Pongpipat Company Limited	CID003208
Tin	Tin Technology & Refining	CID003325
Tin	Dongguan CiEXPO Environmental Engineering Co., Ltd.	CID003356
Tin	PT Rajawali Rimba Perkasa	CID003381
Tin	Luna Smelter, Ltd.	CID003387
Tin	Yunnan Yunfan Non-ferrous Metals Co., Ltd.	CID003397
Tin	Precious Minerals and Smelting Limited	CID003409
Tin	Gejiu City Fuxiang Industry and Trade Co., Ltd.	CID003410
Tin	PT Mitra Sukses Globalindo	CID003449
Tin	CRM Fundicao De Metais E Comercio De Equipamentos Eletronicos Do Brasil Ltda	CID003486
Tin	CRM Synergies	CID003524
Tin	Fabrica Auricchio Industria e Comercio Ltda.	CID003582
Tin	PT Putera Sarana Shakti (PT PSS)	CID003868

Metal	Smelter name	RMI ID
Γin	PT Premium Tin Indonesia	CID000313
- Tin	CV Ayi Jaya	CID002570
Γin	PT Bangka Prima Tin	CID002776
Tin	PT Bangka Tin Industry	CID001419
Tin	DS Myanmar	CID003831
Tin	PT Rajehan Ariq	CID002593
Tungsten	A.L.M.T. Corp.	CID000004
Tungsten	Kennametal Huntsville	CID000105
Tungsten	Guangdong Xianglu Tungsten Co., Ltd.	CID000218
Tungsten	Chongyi Zhangyuan Tungsten Co., Ltd.	CID000258
Tungsten	CNMC (Guangxi) PGMA Co., Ltd.	CID000281
Tungsten	Global Tungsten & Powders LLC	CID000568
Tungsten	Hunan Chenzhou Mining Co., Ltd.	CID000766
Tungsten	Hunan Jintai New Material Co., Ltd.	CID000769
Tungsten	Japan New Metals Co., Ltd.	CID000825
Tungsten	Ganzhou Huaxing Tungsten Products Co., Ltd.	CID000875
Tungsten	Kennametal Fallon	CID000966
Tungsten	Wolfram Bergbau und Hutten AG	CID002044
Tungsten	Xiamen Tungsten Co., Ltd.	CID002082
Tungsten	Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.	CID002313
Tungsten	Ganzhou Jiangwu Ferrotungsten Co., Ltd.	CID002315
Tungsten	Jiangxi Yaosheng Tungsten Co., Ltd.	CID002316
Tungsten	Jiangxi Xinsheng Tungsten Industry Co., Ltd.	CID002317
Tungsten	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.	CID002318
Tungsten	Malipo Haiyu Tungsten Co., Ltd.	CID002319
Tungsten	Xiamen Tungsten (H.C.) Co., Ltd.	CID002320
Tungsten	Jiangxi Gan Bei Tungsten Co., Ltd.	CID002321
Tungsten	Ganzhou Seadragon W & Mo Co., Ltd.	CID002494
Tungsten	Asia Tungsten Products Vietnam Ltd.	CID002502
Tungsten	Hunan Shizhuyuan Nonferrous Metals Co.,	CID002513
	Ltd. Chenzhou Tungsten Products Branch	
Tungsten	H.C. Starck Tungsten GmbH	CID002541
Tungsten	TANIOBIS Smelting GmbH & Co. KG	CID002542
Tungsten	Masan High-Tech Materials	CID002543
Tungsten	Jiangwu H.C. Starck Tungsten Products Co., Ltd.	CID002551
Tungsten	Niagara Refining LLC	CID002589
Tungsten	China Molybdenum Tungsten Co., Ltd.	CID002641
Tungsten	Ganzhou Haichuang Tungsten Co., Ltd.	CID002645
Tungsten	Hydrometallurg, JSC	CID002649
Tungsten	Unecha Refractory metals plant	CID002724
Tungsten	Philippine Chuangxin Industrial Co., Inc.	CID002827
Tungsten	ACL Metais Eireli	CID002833
Tungsten	Moliren Ltd.	CID002845
Tungsten	Lianyou Metals Co., Ltd.	CID003407
Tungsten	JSC "Kirovgrad Hard Alloys Plant"	CID003408
Tungsten	NPP Tyazhmetprom LLC	CID003416
Tungsten	Hubei Green Tungsten Co., Ltd.	CID003417
Tungsten	Albasteel Industria e Comercio de Ligas Para Fundicao Ltd.	CID003427
Tungsten	Cronimet Brasil Ltda	CID003468
Tungsten	Artek LLC	CID003553
Tungsten	Fujian Xinlu Tungsten Co., Ltd.	CID003609
0	OOO "Technolom" 2	CID003612

Metal	Smelter name	RMI ID
Tungsten	OOO "Technolom" 1	CID003614
Tungsten	LLC Vostok	CID003643
Tungsten	YUDU ANSHENG TUNGSTEN CO., LTD.	CID003662
Tungsten	HANNAE FOR T Co., Ltd.	CID003978
Tungsten	DONGKUK INDUSTRIES CO., LTD.	CID004060
Tungsten	Tungsten Vietnam Joint Stock Company	CID003993

# ANNEX IV: LIST OF 3TG COUNTRIES AND TERRITORIES OF ORIGIN

Af-la orieta o	
Afghanistan	
Åland Islands	
Albania	
American Samoa	
Andorra	
Angola	
Argentina	
Armenia	
Aruba	
Australia	
Austria	
Azerbaijan	
Bahamas	
Barbados	
Belarus	
Belgium	
Benin	
Bermuda	
Bolivia	
Brazil	
Bulgaria	
Burkina Faso	
Burundi	
Cambodia	
Canada	
Central African Republic	
Chile	
China	
Colombia	
Congo	
Czechia	
Democratic Republic of the Congo	
Djibouti	
Dominica	
Dominican Republic	
Ecuador	
Egypt	
Eritrea	
Estonia	
Ethiopia	
Finland	
France	
Georgia	
Germany	
Ghana	
Guam	
Guatemala	

Guinea
Guyana
Honduras
Hong Kong
Hungary
Indonesia
Ireland
Israel
Italy
Japan
Jersey
Kazakhstan
Kenya
Korea
Kyrgyzstan
Liberia
Liechtenstein
Lithuania
Luxembourg
Madagascar
Malaysia
Mali
Mauritania
Mexico
Mongolia
Morocco
Mozambique
Myanmar
Namibia
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
Norway
Panama
Papua New Guinea
Peru
Philippines
Poland
Portugal
Russian Federation
Rwanda
Samoa
Saudi Arabia
Senegal
Sierra Leone
Singapore

Slovenia
South Africa
South Sudan
Spain
Sudan
Suriname
Sweden
Switzerland
Taiwan
Tajikistan
Tanzania
Thailand
Turkey
Uganda
United Arab Emirates
United Kingdom
United States of America
Uzbekistan
Viet Nam
Zambia
Zimbabwe

#### PUBLISHED BY

Volkswagen AG

Sustainability Management Procurement

Letterbox 11/1338

38436 Wolfsburg

Germany

#### CONTACT

sustainability@vwgroupsupply.com

#### CONCEPTION, EDITING AND DESIGN

Volkswagen AG

Levin Sources

#### IMAGE SOURCES

Volkswagen Group and its Group brands
GIZ Gesellschaft für internationale Zusammenarbeit

#### PUBLICATION

July 2023

#### © Volkswagen AG

Errors and omissions expected

#### DISCLAIMER

At the brands of the Volkswagen Group, work on all types and models never ceases, so please allow for the fact that changes in design, equipment and technical specifications may be made at any time. Consequently, the data and descriptions in this report cannot give rise to claims of any kind.

The English version of the nonfinancial report is binding.

#### YOUR FEEDBACK

In the interest of improving and advancing our commitment to sustainability, we would be delighted to receive your feedback on our report. You can send us your views online under the e-mail address on the left.