



Environmental, Social  
and Governance Report



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## About this Report

The *Environmental, Social and Governance Report* (hereinafter “this report” or “ESG report”) provides an account of the performance of CMOC Group Limited (hereinafter “CMOC”, “we”, or “the company”) in terms of fulfilling environmental, social, and governance responsibilities in 2024. For more information about the company, please refer to the 2024 Annual Report issued by the company on the Shanghai Stock Exchange (SSE) and the Hong Kong Stock Exchange (HKEX).

This report is compiled based on the *Environmental Information Disclosure Guide* issued by the SSE and the *Environmental, Social and Governance Reporting Guide* (HKEX Reporting Guide), including conformance with the latter’s “comply or explain” provisions, as published by the HKEX. Information and data in the report are obtained from CMOC’s official documents and statistical reports, as well as summaries and statistics provided by its affiliates. The scope of disclosure and entities covered in this report are consistent with the 2024 Annual Report. The main change from the 2023 disclosure scope is the exclusion of the Northparkes Mines operation in Australia, which was sold in 2023.

This report was published on March 21, 2025, following review and approval by the Board of Directors. Data and information in this report reflect the reporting period from January 1, 2024, to December 31, 2024, which is consistent with the 2024 Annual Report. Additional information that is relevant to the subject matter of this report and derived from events in 2025 prior to the publication date may also be included to ensure that investors have full access to material information. Events after the reporting period are clearly identified as such in the body of the text. We encourage users of this report to contact our sustainability department for inquiries (esg@cmoc.com). This report can be downloaded from the official websites of the company (www.cmoc.com), SSE (www.sse.com.cn), or HKEX (www.hkexnews.hk).

The boundaries of this ESG report represent a snapshot in the evolution of the company and its sustainability governance

structure. CMOC published its first ESG report in 2017, and continues to publish an updated ESG report on an annual basis. In 2018, the company designated the Board of Directors as the highest governance body for ESG matters, established a Strategic and Sustainability Committee at the Board level, and formulated a roadmap for a sustainability governance system. In recent years, the company has continued to build, update, and implement this sustainable governance system in accordance with the roadmap. We have nominated a member of the senior management in charge of ESG, and established a three-tier ESG management framework to oversee the implementation of ESG strategy and policies, with clear divisions of responsibility for the Board, senior executives, and our individual operating sites.

In 2024, we updated and published the *Community Policy* and *Environmental Policy*, which strengthen our commitment to community and environmental management by aligning with stakeholder expectations, international standards and good practices. CMOC currently has in place 13 compliance and sustainability policies, namely the *Code of Business Conduct*, *Supplier Code of Conduct*, *Anti-Corruption Policy*, *Export Controls Policy*, *Economic Sanctions Policy*, *Human Rights Policy*, *Environmental Policy*, *Community Policy*, *Health, Safety, and Environmental Policy*, *Employment Policy*, *Anti-Money Laundering Policy*, *Global Guidelines on Privacy*, and the *Responsible Production and Sourcing Policy*. The sustainability policies mentioned in this report are applicable to CMOC and all of its directly or indirectly controlled or majority-owned subsidiaries. These policies can be found on and downloaded from the official website of the company (www.cmoc.com).

As in previous years, the company continued to seek external assurance in 2024, further expanding its coverage. This year, assurance extended to the Group headquarters, all mining sites (namely Tenke Fungurume Mining and CMOC Kisanfu Mining in the Democratic Republic of the Congo, CMOC Brasil in Brazil, our China mining operations), and IXM. This marks the first time

that external assurance has achieved 100% coverage of all Group operations.

In 2024, MSCI ESG Ratings maintained CMOC’s rating at “AA”<sup>1</sup>.

## Global Reporting Initiative (GRI)

As in 2023, in addition to addressing disclosure requirements of the SSE and HKEX Reporting Guide, this report also provides disclosures on material sustainability matters in accordance with the Global Reporting Initiative (GRI) Standards framework. The GRI disclosures were reported according to a harmonized data reporting process that included all business operations. Indexes to the HKEX ESG and the GRI content of this report are appended.

## Cautionary Statement

This report includes forward-looking statements. All statements in this report, dated March 21, 2025, other than disclosures of historical facts, that address business activities, events, or developments that the company expects or anticipates may or will occur in the future (including but not limited to projections, targets, estimates, and business plans) are forward-looking statements. A range of factors and uncertainties may cause the company’s actual results or developments to differ materially from those indicated by these forward-looking statements. The company undertakes no obligation or responsibility to update these statements, nor do the statements constitute a substantive commitment by the company to investors. Investors are advised to pay attention to investment risks.

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## About CMOC

Headquartered in the People's Republic of China, CMOC is a public holding company engaged in the mining, processing, and trading of base and rare metals. With its main business presence in Asia, Africa, South America, and Europe, the company is one of the world's largest producers of copper, cobalt, molybdenum, tungsten, and niobium. It is also a major producer of phosphatic fertilizers in Brazil and ranks among the world's leading metals merchants through CMOC's wholly-owned subsidiary IXM. The company is listed on the Shanghai Stock Exchange (SHA: 603993) and the Hong Kong Stock Exchange (HKEX: 03993).

Specialized in the mining and trading of metals, CMOC has a vision to be a highly esteemed, modern, and world-class resources company. In order to leverage the strategic opportunities presented by the global energy transition and achieve the company's long-term goals, CMOC has set out a number of overarching development goals for the future, to be implemented in three steps: First, the company has "laid a foundation" by cutting costs and raising efficiency, while

upgrading organizational structures and establishing global governance mechanisms, so as to create systems and improve mechanisms to attract top mining talent and build capacity. Second, the company will "level up" by ramping up construction and production at CMOC's world-class TFM mixed mine and KFM mine, with a view to doubling output and equipping company personnel with valuable expertise. This stage will also involve the enhancement of modern governance practices to improve the management of subsidiaries. Third, the company will seek to "leap forward" and become a world-class company, which will involve growing the business and company cash flow, developing our workforce and project pipeline, and accelerating the development of key regions and minerals to achieve the company's vision and goals.

CMOC's ESG strategy is closely aligned with the above development goals. First, the company has established an ESG management system which is integrated with the CMOC risk management and governance frameworks. Second, the company will strengthen medium-term and long-term planning,

improve ESG performance, develop new management systems for climate change, biodiversity, and other issues, and align all our assets with international benchmarks. Third, the company will seek to achieve world-class ESG performance and create favorable conditions for the company to further access resources, markets, and financing. Currently, CMOC is in the critical second "leveling up" phase of its three-stage strategy. In 2024, as we strengthened our ESG governance framework, we advanced in two key areas. First, we further aligned operational units with international standards to mitigate risks and enhance performance. Second, we conducted a gap analysis at the Group headquarters, where we applied the same standards to strengthen risk management, improve long-term planning, and enhance technical support for operational units.

As of December 31, 2024, the company's main mining assets were located in the Democratic Republic of the Congo (DRC), China, and Brazil, and its metal trading business spanned more than 80 countries.



### Tenke Fungurume Mining (TFM), located in the Democratic Republic of the Congo

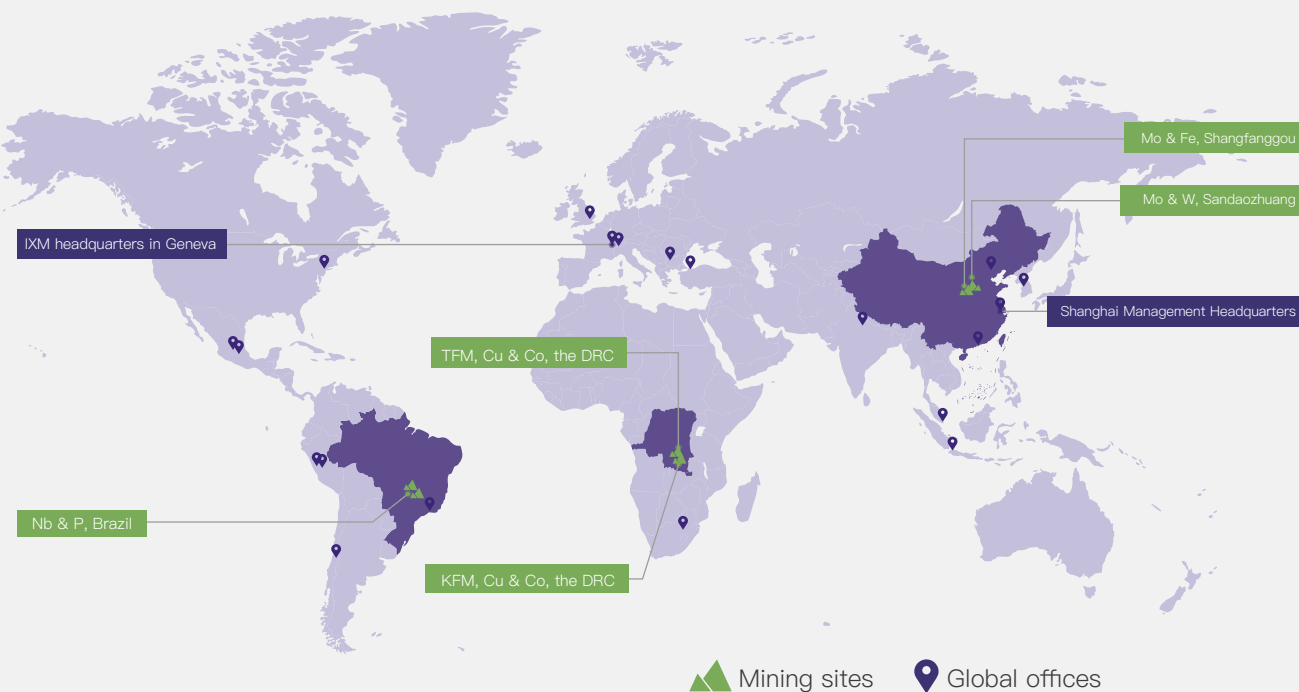
CMOC holds 80% equity in TFM, one of the world’s largest copper and cobalt producers. TFM engages in exploring, mining, processing, refining, and selling copper and cobalt in a mining concession that covers over 1,500 sq. km. The main products are copper cathode and cobalt hydroxide. TFM operates a large, high-grade copper deposit that is also home to one of the world’s largest high-grade cobalt deposits. As of the end of 2024, the TFM mixed mine had reached full production capacity.

### CMOC Kisanfu Mining (“KFM”), located in the Democratic Republic of the Congo

In December 2020, CMOC acquired the KFM copper–cobalt mine, in which it currently holds a 71.25% stake. As one of the world’s leading cobalt and copper projects, the KFM mine is home to large untapped resources of high-grade cobalt and copper, and is expected to create significant synergies with TFM’s operations. As of the end of 2024, Phase I of the mining, processing, and smelting project at KFM had reached full cathode copper production.

### Sandaozhuang molybdenum–tungsten mine and Shangfanggou molybdenum mine, located in China

CMOC has the leading ferro–molybdenum and molybdenum oxide production capacity in China. The Sandaozhuang molybdenum–tungsten mine is wholly owned and operated by CMOC, and is home to very large primary deposits of molybdenum and tungsten, which CMOC produces very competitively and at a low cost. The Shangfanggou molybdenum mine in Luanchuan (close to the Sandaozhuang molybdenum–tungsten mine), owned by Fuchuan Mining, a joint venture of CMOC, also has large deposits of molybdenum and iron ore as by-product, which are located close to the surface and relatively easy to mine. Operational capacity continued to increase over the course of 2024.



### CMOC Brasil located in Brazil

CMOC holds 100% equity in CMOC Brasil, which is a leading producer of phosphate fertilizer in Brazil and spans the entire phosphate supply chain. CMOC Brasil is also a world-leading niobium producer and is involved in exploiting and processing niobium minerals. Its main product is ferroniobium.

### IXM, headquartered in Switzerland

With offices in 12 countries and trading activity in more than 80 countries, IXM is fully owned by CMOC. It is one of the largest merchants of non-ferrous metals and plays a key commercial role at each stage of the metals supply chain, fueling the energy transition.

Production data of CMOC for 2024 is provided below, and can also be found in the CMOC annual report.

Major products	Production volume
Copper metal (tonnes)	650,161
Cobalt metal (tonnes)	114,165
Molybdenum metal (tonnes)	15,396
Tungsten metal (excluding Yulu Mining) (tonnes)	8,288
Niobium metal (tonnes)	10,024
Phosphate fertilizers (1,000 tonnes)	1,180
Physical trade volume (1,000 tonnes)	5,545

The following table provides a summary of CMOC's key economic contributions to global operations:

For the year ended December 31, 2024 (million RMB)	China	Africa	Brazil	IXM	Other countries	Total
Payments to suppliers	16,833.0	16,718.8	3,692.5	128,376.1	4.8	165,625.1
Payments to employees wages and benefits	1,224.7	1,140.7	484.6	946.6	20.1	3,816.7
Payments to investors:	5,036.5	588.0	137.1	1,765.4	–	7,527.0
Dividends	3,433.6	499.5	–	–	–	3,933.1
Interest	1,602.9	88.5	137.1	1,765.4	–	3,593.9
(Refunded) Payments to governments	2,323.4	10,633.3	339.6	208.7	43.2	13,548.2
Community spending	162.2	293.9	1.8	1.0	–	458.9
<b>Direct economic contributions</b>	<b>25,579.8</b>	<b>29,374.7</b>	<b>4,655.6</b>	<b>131,297.7</b>	<b>68.1</b>	<b>190,976.0</b>

CMOC applies the PRC Generally Accepted Accounting Principles when consolidating information in its annual report. At the close of the reporting period CMOC had a total of 12,317 employees and 21,494 contractors across all business segments and corporate management sites. Of this total of 33,811 personnel, 30,386 were male and 3,425 (approximately 10.1%) female.

## External Initiatives

CMOC is a member of the United Nations Global Compact (UNGC), and CMOC CEO Ruiwen Sun has pledged to incorporate the Ten Principles of the UNGC into the company's corporate strategy, organizational culture, and routine operations, as well as work with stakeholders to address global challenges. The company is also committed to supporting the UN's 17 Sustainable Development Goals, as demonstrated by the measures outlined in the various sections of this report.

In China, CMOC is a member of numerous industry associations, including member of the governing board of the China Mining Association, member of the Chairing Bureau of the China Tungsten Industry Association, Vice-President of the China Nonferrous Metals Industry Association (in addition to Executive Vice-President of its Molybdenum Sub-Committee and Rotating Chair of its Nickel-Cobalt Sub-Committees), Vice President of the Alliance of Chinese Nonferrous Metals

Enterprises for International Capacity Cooperation, and Vice-President of the China Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters (CCCMC).

CMOC is a sustaining member of the Cobalt Institute, a non-profit international trade association that promotes the sustainable and responsible production and use of cobalt in all forms. The company has also joined the Better Mining initiative and the Fair Cobalt Alliance, through which it supports efforts to improve conditions at artisanal and small-scale mining sites and within neighboring communities. In addition, CMOC participates in the Responsible Minerals Initiative (RMI), which provides companies with tools and resources to facilitate the responsible sourcing of minerals.

In addition to the initiatives supported by the Group headquarters, our various affiliates also participate in a range of other initiatives tailored to local needs and operational circumstances. For example, both TFM and KFM in the DRC are supporting companies of the Extractive Industries Transparency Initiative – DRC (EITI-DRC) and part of the Lubumbashi and Kolwezi Working Groups for the Voluntary Principles on Security and Human Rights (VPSHR). TFM joined the Copper Mark, a leading assurance framework that aims to promote responsible production practices, and was awarded the certification in 2024. IXM also became a partner of the Copper Mark to support the objectives and activities of this initiative.

## Message from the Chairman of the Board of Directors

2024 was a milestone year for CMOC. Following the commissioning of our two world-class mining projects in the DRC, both of which are operating at planned capacity, we now rank among the world's top 10 copper producers and the 20 most valuable mining companies. These achievements mark the beginning of a new chapter for CMOC. To realize our vision of becoming a "highly esteemed, modern, world-class resources company," we are implementing a new round of organizational reforms, leveraging innovation to optimize processes, improving efficiency, driving technological empowerment, and cultivating a dynamic corporate culture that can adapt to an ever-changing global landscape. Throughout this process, we have embedded ESG principles into our Group-wide risk management framework, talent development programs, and corporate culture—an acknowledgement of the crucial role that our ESG strategy plays in meeting stakeholder expectations and positioning CMOC as a true international leader.

This year, we made several key achievements in ESG management. In 2024, the Group headquarters and our Chinese mining site completed an ESG assurance review, extending ESG assurance across all business segments. The assurance process enabled us to drive consistency of ESG approach and systematically identify management gaps. At KFM, which was commissioned in 2023, we obtained ISO certifications for our quality, environmental, and occupational health and safety management systems and successfully completed the RMI's Responsible Minerals Assurance Process (RMAP), laying a solid foundation for comprehensive ESG risk management. In addition, our TFM operation became the first African mine to

achieve The Copper Mark certification and is now working to close all identified gaps and complete the re-audit process. At CMOC Brasil, we advanced within the NOSA Five-Star Audit System, solidifying our position as a regional leader in HSE performance. Meanwhile, IXM continued to strengthen supply chain management practices to ensure the responsible sourcing of minerals.

In terms of climate action, our TCFD-based financial modeling highlights how our proactive climate strategy mitigates climate risk exposure and enhances resilience while reaffirming our commitment to achieving peak carbon and net-zero across global operations. In 2024, we kept the momentum in electrification. At our Chinese operations, electric vehicles now account for 93% of haulage trucks, while CMOC Brasil has launched a pilot program to procure a new fleet of electric haulage vehicles. In the DRC, our hydropower and photovoltaic projects are paving the way for the next phase of electrification.

For our workforce, we enhanced cultural integration and integrity training to foster a positive workplace culture and encourage ethical practices that support their personal development and the company's long-term growth. In our communities, we continued to invest proactively, allocating RMB 292 million (US\$ 40.9 million) to education, healthcare, economic development, and infrastructure in our operating regions. Globally, our total direct economic contribution amounts to approximately RMB 191 billion (US\$ 27 billion).

At the same time, we remain acutely aware of the significant challenges ahead. With the rapid increase in production, we must intensify investments and enhance performance in environmental strategic planning, ensure our tailings management meet international standards, strengthen our talent pipeline, and deepen engagement with local communities and stakeholders.

We are deeply saddened by the workplace fatalities that occurred in 2024. In recent years, heightened focus on construction activities diverted management attention from safety, leading to a decline in the safety culture at our DRC site. These incidents prompted serious reflection at all levels of management. In response, we launched a "Zero Fatality Campaign" at the beginning of 2025 and are committed to taking all necessary measures to swiftly and decisively improve safety standards.

Finally, I extend my heartfelt gratitude to all our employees for their dedication to our sustainability efforts. I also sincerely thank our shareholders, local governments, community members, and NGOs for their steadfast support, as well as our customers and partners for their trust. As we enter this new phase of reform, we remain committed to "Responsible Mining for a Better World." With your support, we look forward to reaching new heights on our sustainable journey.



March 21, 2025

## Management Approach

As a company with a growing international presence, CMOC fully recognizes the importance of ESG and responsible sourcing in its access to resources, markets, and financing. In recent years, international and Chinese stakeholders' expectations of sustainability-related issues have been evolving rapidly. We face a combination of increasingly high expectations and strict regulatory requirements on matters including the environment, tailings, contractor management and supply chain due diligence. Following the completion of the first phase of our three-step growth strategy, we have established a three-tier ESG management framework with clear divisions of responsibility for Board members, senior executives, and our individual operating sites. As we enter the second "leveling up" phase, we are enhancing our medium- to long-term planning to deliver continued improvements to our ESG performance. In particular, in those material and high-risk areas, such as HSE, tailings management, contractor management, and responsible sourcing, CMOC further identified gaps, allocated resources, implemented corrective action plans, and improved performance.

Our 13 compliance and sustainability policies outline CMOC's commitments in ESG-related areas, including business ethics, supply chain management, environmental protection, social responsibility, and employment. We use a unified ESG standard across the Group to measure performance. For our mining business, risks are primarily managed and assessed using the Risk Readiness Assessment (RRA) published by the RMI and The Copper Mark. For our metals trading business, due diligence procedures for the mineral supply chain are aligned with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (OECD Guidance) and The Joint Due Diligence Standard for Copper, Lead, Molybdenum, Nickel, and Zinc (JDD). The ESG department monitors and provides technical guidance on the implementation of the ESG standards for each business unit. In accordance with the sustainable development strategy

formulated by the Board of Directors, the ESG team provides guidance to Group-level departments and each of our operating units to strengthen medium- and long-term planning and risk management. The ESG department also leads ESG training initiatives across all levels of the Group and strengthens internal and external communications to foster company-wide consensus on ESG.

At the business unit level, ESG teams at each operation are responsible for coordinating and strengthening cross-departmental collaboration on ESG-related matters such as HSE, human resources, compliance, and community. They work to align with the aforementioned international standards and drive continuous improvements in ESG performance. Each operation has developed its own quantitative ESG key performance indicators to encourage management-level staff to focus on priority areas. In accordance with the Group ESG strategy and based on stakeholder requirements and the characteristics of their respective metal products, all our operations initiated measures to perform RRA gap analysis, and the sites in high-risk jurisdictions progressively conduct third-party ESG audits.

CMOC's compliance and sustainability policies apply to the entire Group, as well as all of its directly or indirectly controlled or majority-owned subsidiaries. As part of our commitment to aligning with international benchmarks, these policies reference international best practice frameworks, including the International Finance Corporation's (IFC) Environmental and Social Performance Standards, the International Labor Organization (ILO) Conventions, the International Bill of Human Rights, the UN Guiding Principles on Business and Human Rights (UNGPR), the Voluntary Principles on Security and Human Rights (VPSHR), the OECD Guidance, and the RRA. Guided by these policies, each of our sites has formulated and updated its administrative measures and procedures to reflect actual circumstances and material risks.

## External Assurance and Audits

All our mining sites undergo recurrent third-party audits to verify their alignment with applicable certification and compliance schemes in environmental, quality, health, and safety management, including ISO14001, ISO45001, and ISO9001. In 2024, our new KFM operation established ISO-compliant management systems and successfully obtained all three certifications for the first time.

In addition to aligning with ISO standards, in accordance with our Group-wide strategy and to ensure that our ESG performance meets international standards, we encourage all our mining sites to undergo third-party ESG audits and certifications. For example, CMOC China's tungsten operation began undergoing audits under the RMI's Responsible Minerals Assurance Process (RMAP) in 2020. It completed its latest reassessment in December 2024 and remains on the list of RMAP Conformant Tungsten Smelters. In June 2023, our TFM site in the DRC commissioned an RMAP audit and successfully completed reassessment in October 2024, earning a place on the RMAP Conformant Copper Processors and RMAP Conformant Cobalt Refiners lists. In 2024, KFM also began undergoing RMAP audits and is currently included in the RMAP Conformant Copper/Cobalt Refiners lists. The relevant assessment reports can be found on the RMI website (<https://www.responsiblemineralsinitiative.org/facilities-lists/active-conformant-facilities-list/>). As Africa's first participating site in The Copper Mark, TFM underwent its initial on-site assessment in January 2024. Based on the assessment results for RRA Version 2.0, TFM fully met 16 out of 32 criteria and partially met 15, with one non-applicable criterion. TFM is currently implementing an action plan to address the partially met items, with a view to achieving full compliance in its 2025 reassessment. Its assessment report can be found on The Copper Mark website (<https://coppermark.org/participants-home/participants/>).



In 2024, we continued to seek external assurance on the progressive implementation of the ESG framework at the Group headquarters and all mining sites, as well as on IXM's mineral supply chain due diligence practices. CMOC utilizes the RRA framework across all operations to drive consistency of ESG approach. We have retained the services of Corporate Integrity Ltd. for external assurance. The assurance scope covers the present ESG report, the Copper Mark assessment and the product stewardship at TFM, and the implementation of RRA at headquarters and all other operations. During the assurance process, specialists conducted interviews with the Chairman, CEO, ESG Vice President, and other senior executives and functional department heads at the Group headquarters. They also interviewed senior management teams across all our operations. Their assurance statements are annexed to this report.

## Governance

Under CMOC's ESG management framework, responsibilities are divided among the Board of Directors (the company's highest governing body), senior management, and individual operating sites. The CMOC Board of Directors (the Board) is responsible for risk oversight. There are four standing committees on the Board, namely Strategic and Sustainability, Audit and Risk, Nomination and Governance, and the Remuneration Committee. The Strategic and Sustainability Committee is led by the Chairman of the Board of Directors and is responsible for formulating the company's sustainability strategy. It also works with the Audit and Risk Committee to review and report non-financial material risks to the full board, and discuss with management the adequacy of measures to identify and manage sustainability-related material risks. Members of the company's highest governing body and senior executive team engage with investors and other stakeholders

on ESG-related topics on a regular basis. In addition, the company is committed to improving the shared knowledge, skills, and expertise of the highest governing body in relation to sustainable development, and to encouraging Board members to participate in training organized by regulatory bodies or industry organizations.

The Chairman of the Board of Directors and the Group Senior Executives are based at the company headquarters in China. We have appointed a Vice President for Sustainable Development, who reports to the Group CEO and the Strategic and Sustainability Committee of the Board. This Vice President is responsible for executing Board decisions on sustainability matters and overseeing the implementation of the company's sustainable development strategy. Under her leadership, the Group ESG department is responsible for implementing sustainability policies, monitoring the performance of each business unit, providing technical support, and tracking and assessing ESG risks. The Vice President for Sustainable Development is also leading the Sustainability Executive Committee established by the company in 2019. This is a multifunctional group whose members are nominated from the Board Office, HSE, Internal Control and Audit, Legal and Compliance, Global Supply Chain, Human Resources, Business Development, Commodity and Marketing, Anti-Corruption, and ESG departments. Its primary role is to promote cooperation and collaboration between functional departments on key ESG topics and seek cross-cutting solutions.

The Board of Directors and executive management attach great importance to risk control and audit procedures, which constitute a key part of Group-wide risk management policies. In 2024, we took a series of measures to enhance our comprehensive risk management strategy and safeguard our operational resilience. Specifically, these efforts included:

- Strengthening the supervisory function of the Audit and Risk Committee: By holding quarterly meetings to log and review reports from the Internal Audit department on important matters concerning Group risk management and internal control/audits, the committee provides continuous oversight of risk prevention and mitigation efforts, ensuring that risks to the company's operations remain under control.
- Adopting a problem-oriented approach to risk management: Through a combination of internal controls and special audits to diagnose deficiencies in management and internal controls, identify root causes, and develop targeted solutions, we have established an effective internal control system, ensuring that risk controls are embedded across all of our business units.
- Dispatching on-site internal control and audit personnel to oversee the day-to-day control of material risks specific to each operating site, improve risk management systems, and drive the implementation of control measures.

## Business Ethical Values

Our *Responsible Production and Sourcing Policy*, *Code of Business Conduct (CBC)*, *Anti-Corruption Policy*, *Human Rights Policy*, *Supplier Code of Conduct*, *Health, Safety*, and *Environment Policy*, and *Employment Policy* address CMOC positions on business ethics, including human rights, anti-corruption, and conflicts of interest, as well as the promotion of safe and healthy operations, workplace equality, and the elimination of discrimination. All staff are required to undergo regular compliance training on the CBC and Anti-Corruption policies. These policies also communicate the responsibility of individual employees and suppliers to report violations of company policies or the law, and provide guidance for acting on that obligation, including use of the company's whistleblower channel.

## Management of ESG Risks

All our sites adopt risk-based ESG framework. We monitor operational risks such as environmental, occupational health and safety, community relations, business integrity, as well as human resources related risks, and are required to implement appropriate mitigation measures and controls to maintain risks at acceptable levels. However, local sustainability risks may vary significantly between sites due to differences in the natural, economic, social, and human environment. Our Chinese and Brazilian operations are both situated in developing countries and face constantly evolving and tightening regulatory frameworks, such as environmental regulations in China and tailings regulations in Brazil. At CMOC Brasil, the importance of community engagement has become increasingly evident in recent years in the context of environmental management and permitting.

At our operations in the DRC, we aim to comply with international standards in areas where local laws and regulations are weak or absent. However, the low level of socio-economic development and the weak infrastructure present a significant challenge for industrial business operations. In recent years, the significant influx of migrants into the region has caused increasing pressure associated with illegal artisanal mining and community development within the TFM concession. In addition, as a newly commissioned mine, TFM has witnessed rapid growth in output with a high turnover of employees and contractors, which has complicated efforts to promote a safety culture.

In comparison, our KFM site is located in a relatively sparsely populated area and is completely enclosed by fencing, meaning the risk of illegal artisanal mining is relatively small, unlike other mining companies in the region. As a new mining operation, KFM continues to navigate a number of risk management challenges, including developing management systems aligned

with international standards and addressing the influx of migrants in neighboring communities.

As a metals trading company, the main challenge faced by IXM lies in the increasing scrutiny from stakeholders on the sustainability risks within the mineral and metal supply chain. Therefore, we aim to continually strengthen due diligence on upstream suppliers to ensure that upstream mines and smelters comply with the environmental and social requirements set out in *IXM's Responsible Sourcing Policy*.

At all our sites and the Group headquarters, we have established risk registers, risk management frameworks and reporting systems to mitigate material operational risks, including sustainability risks. We ensure effective communications across all levels, and promptly escalate material risks to higher levels for resolution.

In accordance with our Group-wide *Comprehensive Risk Management System*, we use risk registers to incorporate risk management into operational management processes by developing and implementing action plans for the highest ranked risks, including ESG risks. Risk registers undergo six-monthly reviews by corporate and site management leadership in order to update risk ratings and accompanying action plans and procedures. The corporate risk register is formulated and updated by the Internal Control and Audit department and presented annually to the Audit and Risk Committee of the Board for deliberation.

Under CMOC's reporting system, all sites must submit monthly reports to the Group Senior Executives on ESG practices, including important ESG topics such as workplace safety, environmental protection, local communities, and security. The management submits quarterly reports to the Board that feature a dedicated chapter on safety, environmental

protection, ESG performance, and other relevant topics. Matters of ESG strategy that could have a material impact on company operations are referred to the Board by the Strategic and Sustainability Committee for deliberation and vote. In addition, to ensure full consideration is given to ESG strategic risks and align our long-term growth vision with short-term interests, the Group headquarters makes an active contribution to site-level management procedures on key ESG issues, providing guidance and technical support to relevant business units. In 2024, Group ESG staff worked closely with individual operations to support the development of effective management systems, covering topics such as occupational health and safety, emissions targets, water management, and tailings management.

IXM implements a risk-based management approach and conducts due diligence in order to determine the severity and probability of supplier risks, especially with regard to suppliers in conflict-affected and high-risk areas, for which reasonable steps are taken to implement the due diligence framework envisaged by the OECD Guidance. In 2024, IXM continued to improve its sourcing management system in line with its continuous improvement process.

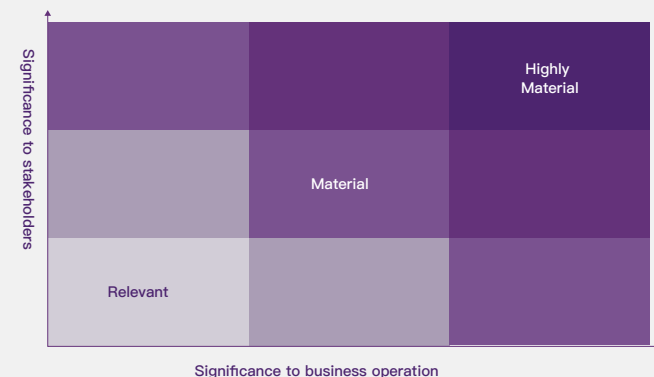
Our materiality assessments, stakeholder engagement, grievance mechanisms, risk registers, and due diligence procedures help to inform us of our key material issues and areas of risk, and to prioritize risk management activities.

## Materiality

CMOC conducts materiality assessments to determine issues with the greatest potential impact on stakeholders, the economy, the environment, and society, as well as to identify material risks to CMOC’s business in terms of accessing capital, finance, markets, and resources. In accordance with the HKEX Reporting Guide and the Global Reporting Initiative (GRI) reporting principles, CMOC has conducted a Group level assessment to identify material issues at our operations for inclusion in our ESG report. These issues help shape risk management interventions at all of our sites, while ensuring we address the material concerns of stakeholders.

Using the guidance referred to above on materiality, our assessment was conducted by considering stakeholder feedback on priority issues according to the current understanding of the CMOC management and ESG team, corporate and site-based risk registers, and feedback from internal and external stakeholders associated with individual operating sites. Notable stakeholder groups providing feedback on sustainability matters include employees, regulatory agencies, investors and financial institutions, downstream customers, communities, human rights-focused NGO associations, and providers of audit and assurance services. Material issues resulting from this information were then prioritized in a materiality matrix and vetted by senior executives of the Group and the Sustainability Executive Committee.

Highly Material	Material
Business ethics & transparency	Economic value generated
Health & safety	Responsible mineral supply chain
Human rights	Reclamation and closure
Environment	Biodiversity
Tailings	Water
Community	Energy
Labor relations	Climate change
Government relations	Air quality
Suppliers/contractors management	Waste/dangerous goods



## Stakeholders

CMOC regards stakeholder engagement as a critical tool in the management of risk and the creation of value for businesses under our management. Strategies for engaging with stakeholders at our operating sites are described in the "Community" section of this report. An overview of relations with stakeholders is presented below.

Stakeholder group	Areas of interest	Engagement methods
<b>Employees and contractors</b>	<ul style="list-style-type: none"> <li>Competitive compensation and benefits</li> <li>Workplace health and safety</li> <li>Training and capacity</li> <li>Protection of human rights</li> </ul>	<ul style="list-style-type: none"> <li>Meetings with union representation</li> <li>Collective bargaining agreements</li> <li>Safety and compliance meetings</li> <li>Training and career development</li> <li>Internal communications channels</li> <li>Human rights due diligence</li> <li>Grievance procedures</li> </ul>
<b>Government and regulatory agencies</b>	<ul style="list-style-type: none"> <li>Compliance with applicable laws and regulations</li> <li>Creating economic benefits</li> <li>Workplace health and safety</li> <li>Benefits to stakeholder communities</li> <li>Environmental stewardship and social responsibility</li> </ul>	<ul style="list-style-type: none"> <li>Compliance reports</li> <li>Annual sustainability report</li> <li>Site visits and inspections</li> <li>Permit applications</li> <li>Meetings on compliance matters</li> <li>Direct meetings</li> </ul>
<b>Investors and financial institutions</b>	<ul style="list-style-type: none"> <li>Protecting the rights and interests of shareholders</li> <li>Timely disclosures of relevant and accurate information</li> <li>Improving corporate governance</li> <li>Conducting business in compliance with laws and regulations</li> <li>Climate change</li> <li>Fulfilling environmental and social responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>Shareholders' meetings</li> <li>Press releases and announcements</li> <li>External reporting</li> <li>Company website</li> <li>Investor meetings and site visits</li> <li>External audits</li> </ul>
<b>Communities</b>	<ul style="list-style-type: none"> <li>Local development</li> <li>Environmental stewardship and social responsibility</li> <li>Employment</li> <li>Opportunities to furnish goods and services</li> <li>Protection of human rights</li> <li>Land acquisition and resettlement</li> </ul>	<ul style="list-style-type: none"> <li>Scheduled community meetings</li> <li>Focus group meetings</li> <li>Notices of procurement opportunities</li> <li>Employment notices</li> <li>Grievance procedures</li> <li>Human rights due diligence</li> </ul>
<b>NGOs</b>	<ul style="list-style-type: none"> <li>Investment in local development</li> <li>Participation in local community programs</li> <li>Environmental stewardship and social responsibility</li> <li>Protection of human rights</li> <li>Equity in sharing benefits</li> </ul>	<ul style="list-style-type: none"> <li>Annual sustainability reporting</li> <li>Direct meetings</li> <li>Contacts through industry groups</li> </ul>
<b>Customers</b>	<ul style="list-style-type: none"> <li>Customer service</li> <li>Quality assurance</li> <li>Product stewardship</li> <li>Protection of human rights</li> <li>Environmental stewardship and social responsibility</li> <li>Climate change</li> </ul>	<ul style="list-style-type: none"> <li>Key account meetings</li> <li>Systematic communications</li> <li>Customer visits to operating sites</li> <li>Participation in trade associations</li> <li>Sustainability reporting</li> <li>External audits</li> </ul>

## Grievance Procedures

To maintain effective stakeholder relationships, CMOC provides corporate and subsidiary-level grievance channels that are available to all stakeholders and published on the Group's website and the websites of its subsidiaries. Anonymous channels are available at all our operations, and there is a grievance channel at Group level that is anonymous and operated by a third-party. At the Group level, complaints are tracked, logged, and resolved by the Legal and Compliance or Anti-Corruption department depending on the nature of the complaint. All mining operations and IXM also have dedicated team or department to register, resolve and track concerns from employees, partners, the community, and other stakeholders.

At our TFM operation in the DRC, community grievances are managed by a dedicated grievances officer appointed by the Community Department, while employee grievances are handled through different channels operated by the Legal and Compliance team, HR department, and local unions. All members of the community, including TFM employees, are able to voice their opinions and provide feedback. Members of the community can also participate in the grievance resolution process through an independent mediation committee. In 2024, TFM updated its procedures for managing community

grievances to improve tracking of response times and provide comprehensive feedback. Grievances are analyzed on a quarterly basis to quickly identify emerging stakeholder concerns and report them to management, leveraging grievance channels as a dynamic management tool.

At our KFM site, we updated the *Grievance Reporting Regulations* to provide employees, contractors, and other stakeholders with a transparent, convenient, and confidential channel for reporting grievances. The General Secretariat, HR team, and ESG department are responsible for handling complaints and updating the company's grievance register. In addition, KFM employs a dedicated officer who records verbal or written complaints from the community, tracks their progress, and provides feedback to complainants.

In 2024, our TFM and KFM operations engaged third-party human rights experts to conduct an assessment of grievance mechanisms effectiveness against the UNGP, as well as provide training for relevant teams. At both operations, the assessment identified a need for increased transparency and predictability, and each site has formulated an action plan that includes regular self-assessments to ensure continuous improvement.

At our operations in Brazil, complaints from employees, the community, suppliers, partners, and other internal and external stakeholders are received and addressed through an anonymous reporting system called "Alô CMOC" and other channels by phone calls, emails and visits. We track, resolve, and then give feedback to complainants. The HR department also encourages employees to report complaints through informal conversations in order to help the company identify employee concerns at the earliest opportunity. In addition, the community department makes regular visits to local residents in order to collect feedback on the company's operations.

Community grievances at our mining and processing sites in China are managed through a "letters and visits" program, through which local people or organizations can provide information, make comments or suggestions, or lodge complaints to the company through correspondence, emails, faxes, phone calls, and on-site visits. IXM also operates a dedicated complaints hotline, which is listed on the company's website. The Compliance department is responsible for the collection, handling, and reporting of complaints.



The grievances mechanism is an important part of CMOC’s ESG framework. By analyzing complaint statistics, we keep abreast of stakeholder dynamics to effectively reduce the negative impacts of our operations. In 2024, all our operations received a total of 1,505 grievances, of which 1,188 (79%) were resolved. 77% of grievances were associated with the TFM site, which can be attributed to the sizeable geographical area occupied by the mining concession, the dense population, and the large footprint of the mine’s operations.

At our TFM site, approximately 52% of the complaints received were in the environmental category, while 36% were associated with resettlement. The number of environmental complaints increased significantly in 2024, primarily driven by the completion of the mixed mine project at the beginning of the year. During the commissioning phase, unstable sulfur dioxide scrubbers at our new sulfuric acid plant caused spikes in sulfur dioxide emissions, triggering collective complaints from neighboring residents. In response, our technical team implemented a comprehensive range of technical measures to improve the performance and stability of the new machinery, reducing pollution at source. According to our monitoring data, the plant’s ambient air quality is compliant with the IFC’s Environmental, Health, and Safety (EHS) Guidelines.

To provide an external confirmation of monitoring results, TFM also engages a third party to conduct annual air quality tests in neighboring communities. Since May 2024, we have not received any further complaints related to air quality. TFM also completed the compensation to all affected residents for verified losses caused by damage to corn crops. To create a harmonious operating environment, TFM has established a buffer zone around the new plant. Residents previously living in this area have been relocated in accordance with TFM’s resettlement procedures, which comply with IFC Performance Standard 5, ensuring full protection of their rights and

well-being. In addition, we are strengthening collaboration between the Environment and Community departments to enhance the complaints handling process, which will enable us to address faster environmental complaints from neighboring communities more efficiently and further mitigate our operational impact.

In 2024, our KFM operation reported an increase in employment-related complaints, which is partly attributed to the company’s efforts to raise awareness of grievance mechanisms among employees and contractors. To enhance

communication with staff, KFM’s Human Resources department and labor contractors have appointed permanent frontline representatives, who ensure that concerns raised by employees are promptly addressed. These measures have delivered a notable improvement in the effectiveness of the company’s grievance mechanisms.

At CMOC Brasil, 37% of complaints were related to harassment and discrimination. In response, we strengthened compliance training on workplace harassment to our Brazilian workforce in 2024.

Reported grievances												
Site	Resettlement	Environment	Employment	Property Damages	Community investments/engagement	Health /safety	Human rights	Security	Land rights and access	Harassment, discrimination and injustice	Other	Total
China	0	2	7	0	0	0	0	0	3	0	4	16
Brazil	0	24	18	1	0	21	2	2	0	74	57	199
TFM	413	604	62	33	0	0	4	1	10	17	14	1,158
KFM	0	5	104	2	0	6	3	1	0	2	7	130
IXM	0	0	0	0	0	0	0	0	0	1	0	1
HQ	0	0	0	0	0	0	0	0	0	0	1	1
Total	413	635	191	36	0	27	9	4	13	94	83	1,505



# Environment

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In 2024, CMOC updated its *Environmental Policy*, which applies to all operating units across the Group. Aligned with international best practices, the policy reinforces commitments in key areas such as climate change, water resources, biodiversity, waste management, and pollution control, providing clearer guidance for environmental management at each operating site.

As a mining company with operations spanning extraction, processing, smelting, and supporting processes, we recognize that each stage of production carries potential environmental risks. Accordingly, the environment remains one of the most prominent ESG issues influencing CMOC, covering climate change, greenhouse gas emissions, biodiversity, tailings management, energy, water resources, air quality, and mine rehabilitation and ecological restoration. As a global mining company, CMOC must manage these issues while meeting the challenges of the different climatic, geographical, ecological, and human environments across its operating sites, as well as the changing and evolving expectations of stakeholders.

CMOC is committed to complying with environmental laws and regulations applicable to our operations. We manage the extent of our environmental impact through risk-based approaches to material issues and adoption of standards. In 2024, we actively promoted collaboration between our environmental and community departments to mitigate the environmental impacts of mining operations on local communities. We also invest in a range of projects to reduce pollution and mitigate our environmental impact. In 2024, CMOC spent RMB 289 million (US\$ 40.5 million) on environmental protection.

Our Chinese, Brazilian, TFM, and KFM operations maintain mature Environmental Management Systems (EMS) certified to ISO 14001 standards. The company also provides necessary training and awareness programs for employees and contractors on environmental objectives and procedures.

Notably, in 2024, our newly commissioned KFM site in the DRC underwent ISO 14001 certification for the first time. Business departments across the company played an active role in this process, developing a comprehensive set of EMS procedures and embedding them into production and operations to drive continuous improvement. As a result, KFM successfully passed the certification audit.

CMOC aligns itself with international trends and standards, and continuously monitors and improves its environmental performance by setting long-term strategies and quantitative targets. In 2021, the company set out two long-term visions for climate change and biodiversity, as well as four short-term environmental performance goals for the emissions intensity of nitrogen oxide (NOx) and sulfur oxide (SOx), the share of energy from renewable sources, and the proportion of recycled water. In 2023, we published the *CMOC Carbon Neutral Roadmap and Action Plan* (more details can be found in the “Climate Change” section of this report), which sets out our commitment to achieve peak Scope I and Scope II greenhouse gas emissions by 2030, net-zero Scope I and Scope II emissions by 2050, and a reduction in our Scope III emissions through a series of short-, medium-, and long-term emission reduction targets. In 2024, we began calculating Scope III emissions to better understand emissions across different categories and set a clear direction for future reduction efforts.

We will review the implementation of these environmental targets on an ongoing basis. In 2024, we implemented desulfurization measures at our acid plants and roasting plants, especially in our Brazil and DRC operations, enabling us to meet our SOx emissions intensity target. However, progress on other targets was slower. NOx emissions intensity rose in 2024 compared to the 2020 baseline, primarily due to increased stripping and transportation volumes at open-pit mines as part of our expansion strategy, leading to higher gasoline and diesel consumption. The proportion of recycled water increased compared to 2023, but also fell short of our target, mainly due to a recalibration of calculations following the divestment of Northparkes Mine in Australia and a prolonged dry season at our Brazil operations, which reduced water recovery rates. In addition, the share of renewable energy did not meet the target, and carbon emissions intensity increased in 2024 compared to the 2022 baseline, also due to a recalibration of calculations following the Northparkes Mine divestment, as well as higher stripping volumes at the KFM mine and the use of thermal power in the DRC due to shortage of hydropower supply. As we continue to adopt environmental protection measures, energy-efficient technologies and renewable energy solutions, we remain confident in achieving our performance targets on schedule.

CMOC environmental performance goals	Base year	2024	
		Results	Progress
5% reduction in NOx emissions intensity by 2025 compared with 2020	4.286 x 10 <sup>-5</sup> (t/t processed ore)	5.752 x 10 <sup>-5</sup>	Ongoing
2% reduction in SOx emissions intensity by 2025 compared with 2020	5.714 x 10 <sup>-5</sup> (t/t processed ore)	4.568 x 10 <sup>-5</sup>	Complete
Reuse at least 83% of water by 2025	NA	80.9%	Ongoing
Source at least 40% of energy from renewables by 2025	NA	36.2%	Ongoing
Carbon reduction short-term goal: Reduce emissions intensity by 15% by 2030 compared with 2022	0.028 (t/t processed ore)	0.034	Ongoing

## Tailings



At our mining operations, mineralized rock is processed and reduced in size to recover the economic mineral, a process known as beneficiation. The residual material left after beneficiation is referred to as tailings, which are typically transported to a tailings storage facility (TSF) for deposition. TSFs vary significantly in design, capacity, operational management, and other factors, but their purpose remains the same: to ensure the safe and effective storage of tailings both during mining operations and after mine closure. Throughout the mine's operational life, TSFs often require continuous raising or expansion.

CMOC is acutely aware of the history of TSF failures and the catastrophic consequences for the public, the environment, and mining businesses involved. We are also conscious that a major TSF incident has the potential to jeopardize community safety and the environment, as well as compromise CMOC's reputation, viability, and business operations. In view of these material risks, responsible tailings management is essential to preventing such catastrophes in the future. CMOC maintains and continues to improve engineering design, safety, and environmental management plans and implements full lifecycle management of tailings facilities to reduce associated risks to communities, the environment, and our operations.

CMOC maintains a set of standards and processes to mitigate risks associated with TSFs, including *CMOC's Corporate Governance Standard for Tailings and Mineral Residue Management, Tailings & Dams Quantitative Performance Objective (QPO) Reporting Procedure*, and the *Tailings & Dams Stewardship Team (TDST) Program*. These standards came into force in February 2019 for all of CMOC's business departments. Another operating regulation entitled *Regulations for Safe Operation of Tailings Facilities* was released in 2021 to reinforce the operational safety of the TSFs of all CMOC's business units.

CMOC's corporate standards and guidelines for tailings management reflect six key governance elements: (i) accountability, responsibility, and competency; (ii) planning and resourcing; (iii) risk management; (iv) change management; (v) emergency preparedness and response; and (vi) review and assurance. CMOC's management strategies include maintaining qualified tailings managers at both the operational and corporate levels; retaining qualified consultants and appointing a certified Engineer of Record (EoR) or technical lead for each TSF; designing, constructing, operating, and closing TSFs in accordance with international standards or national regulations and guidelines; implementing surveillance and monitoring programs; and conducting systematic third-party reviews.

At the Group level, TSF failure is listed as a critical risk in the corporate risk register. The management regularly reviews the implementation of control measures and reports to the Audit and Risk Committee of the Board every year. In response to more stringent regulatory requirements of the countries in which we operate and greater risk aversion among financial institutions, we are working to enhance standards for the governance and oversight of tailing facilities and to strengthen monitoring of our various business units by the Group headquarters. We have established a Group-wide TSF register in accordance with international standards, which is updated on a regular basis. The register provides an overview of technical information, engineering records, expert review, risk evaluation (including climate-related and community risks), and other important elements in the lifecycle of each facility. We pay special attention to the impact of climate change and the flood season on our TSFs. For this reason, we require all mining sites to conduct capacity checks, dam stability maintenance, and other targeted inspections before the onset of the flood season to verify the integrity of dams, flood discharge facilities, and monitoring systems.

At our Chinese site, our TSF is managed by a closed-loop visual dispatching center, which monitors critical areas in real time, processes early warning information, verifies potential issues, and provides feedback. We have also rolled out a drone inspection system, which completes a full inspection of the TSF within 15 minutes using a predefined route and identifies potential safety hazards through image comparisons and data analysis. In addition to faster inspections and early identification of risks, the drone system provides a safer working environment for operating personnel thanks to its ability to conduct inspections in inaccessible areas.

Our Chinese site also leverages regional resources to improve its emergency response capabilities. For example, we recently signed a new mutual assistance agreement with the Luanchuan County emergency services department and established a joint response and prevention mechanism. Additionally, we install dual spillway systems at all new TSFs and those scheduled for closure to minimize the risk of accidents and ensure that production can continue as normal.



In China, we deploy smart unmanned vessels to precisely measure the water depths at different areas throughout the tailing ponds, accurately calculate the water storage capacity, and significantly improve the efficiency and accuracy of daily TSF management.



In the DRC, due to the higher expectations of stakeholders for operations in high-risk jurisdictions and the relatively weak local regulatory framework, we set the goal of conforming with international standards. In 2024, we benchmarked against the Global Industry Standard on Tailings Management (GISTM) to conduct a gap analysis and develop and implement an action plan. We manage TSF operations, maintenance, and monitoring in strict compliance with design standards and company procedures.

At our TFM site, the construction and expansion of TSFs in the context of our mixed ore expansion project has increased the complexity of tailings management. To address this, we maintained biweekly meetings with Engineers of Record (EoRs), published regular TSF inspection reports, recorded and prioritized existing problems, allocated resources for corrective actions, and implemented a closed-loop management approach. In addition, based on the previous GISTM gap analysis, TFM continued executing its action plan.

At KFM, we carried out routine inspections, monitoring, and dam stability maintenance in line with established standards while continuously optimizing safety procedures. In 2024, we also conducted a GISTM gap analysis, laying the groundwork for further strengthening of our TSF governance framework.

At CMOC Brasil, EoRs independently assess the structural integrity and stability of tailings dams and perform semi-annual stability assessments to provide the best guidance for TSF operations, maintenance, and monitoring. We have also enhanced risk visibility by standardizing warning signs in TSF areas.

We recognize the critical importance and public sensitivity surrounding TSF management. CMOC will continue to adopt new technologies, benchmark against international industry best practices and recognized standards, and collaborate

closely with regulatory authorities in host countries. Through ongoing review of gaps in TSF management, we will develop improvement plans, optimize resource allocation, and ensure that TSF risks remain controlled throughout their lifecycle.

## Tailings Safety & Communities

All of CMOC's operating sites have TSF emergency response plans, assess and monitor community risks, and make communities a key priority of emergency preparedness measures.

At our Chinese operations, we attach great importance to the impact of heavy rainfall and other extreme weather events. In response, we have formulated a series of safety measures to mitigate the impact of heavy rainfall on our TSFs, including an emergency response plan to evacuate all people downstream of tailings ponds to a safe area. We also distribute information leaflets to local residents prior to the start of the flood season in order to raise awareness of flood prevention measures, early warning systems, evacuation routes, and emergency contacts. In 2024, we conducted multiple emergency drills, simulating drainage blockages, leaks, dam failures, and seasonal flooding. These exercises enhanced our emergency response and rescue capabilities, reinforced the responsibilities of TSF managers at all levels, and improved interdepartmental coordination and community evacuation efficiency.

At CMOC Brasil, we regularly conduct emergency drills to evaluate the response capabilities of management teams and the effectiveness of our emergency plans, while maintaining close communication with the community. Our technical staff and engineers perform daily visual inspections of dam structures and continuously analyze real-time data from 36 monitoring instruments installed along the dam body. In 2024, 13 community members near the Buraco TSF participated in a drill, helping to strengthen coordination between CMOC Brasil and the local community.

At KFM, we have developed a dedicated emergency response plan for TSF incidents. The plan details the response structure and responsibilities, risk assessment, early warning and reporting mechanisms, emergency procedures, public communication protocols, and post-incident management. In August, we conducted a tabletop emergency drill to assess the feasibility and effectiveness of the plan. The exercise clarified interdepartmental coordination policies for emergencies and strengthened employees' understanding of response procedures.

At TFM, we held four meetings with stakeholders from downstream villages to assess the 2023 TSF emergency drills. A total of 187 participants from four villages joined the discussions, including 84 women. We carefully gathered feedback from residents who participated in the drills and leveraged their insights to further refine and strengthen our TSF emergency response plans.



In 2024, community members participated in TSF emergency drill at CMOC Brasil.

## Reclamation

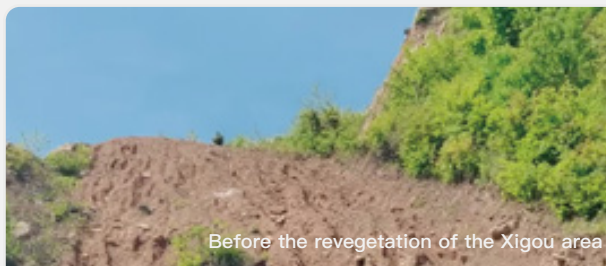


Mining operations inevitably impact the ecological environment. For example, stripping removes topsoil and surface vegetation, causing excavation-related disturbances; waste rock and tailings storage can bury and damage vegetation; and the construction of processing plants and supporting facilities alters the local ecosystem. Since most ecosystems do not naturally recover, mining companies must take proactive measures to restore affected areas and prevent permanent environmental damage, which include progressive reclamation during operations, and formulation and implementation of mine closure plans in accordance with the law and regulations of the host country and international good practices.

In 2024, CMOC continued applying sustainability principles to the design, development, operation, and closure of its mining operations. Strategic planning for the closure of mining and processing facilities is critical to ensuring environmental protection and sustainable land use post-closure. All mining sites have reclamation plans that are regularly updated to reflect site conditions. Each site also complies with local regulations by posting reclamation guarantees, ensuring ecological restoration faces no financial shortages. We follow a progressive reclamation approach, restoring suitable land in a timely manner. CMOC applies practical experience to develop innovative methods and technologies that improve the efficiency and effectiveness of mine rehabilitation. In addition, we have expanded greening efforts at our sites and surrounding areas to support ecological restoration, while reducing soil erosion and dust emissions.

In China, we follow a phased approach to reclamation and tailor plans to local conditions. We have successfully cultivated stable and diverse plant ecosystems through the combined planting of trees, shrubs, and herbaceous species. In addition, we continue to expand investment in ecological restoration and have intensified greening efforts to create visually pleasing landscapes at our mines. In 2024, the Sandaozhuang and

Shangfanggou mines maintained their designation as National Green Mines.

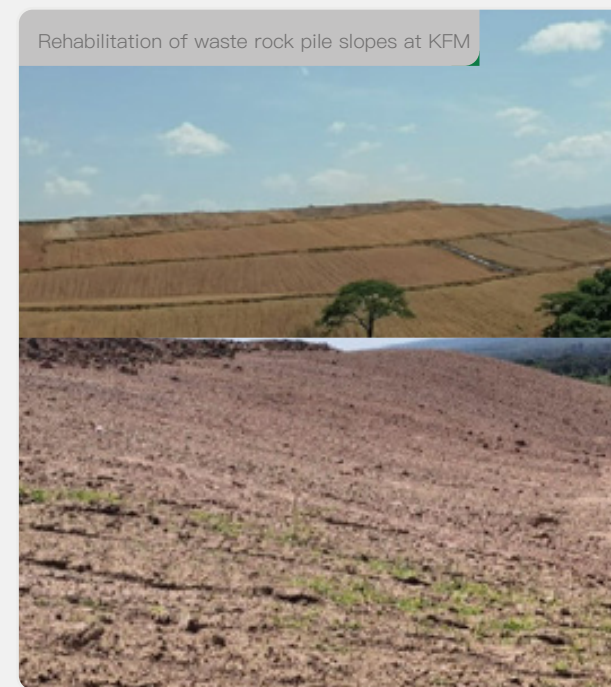


Along key mining roads in the Xigou area, steep waste rock slopes nearly 60 meters high made soil application and retention difficult, posing significant challenges for ecological restoration. To address this, we used erosion-resistant hydroseeding technology to successfully revegetate the barren, high-angle slopes. Today, vegetation covers more than 90% of the area.

At our KFM mine in the DRC, we continue to strip and preserve topsoil for future reclamation. As of 2024, approximately 123,000 cubic meters of topsoil had been preserved, with 40,000 cubic meters already used for onsite rehabilitation and greening. In 2024, reclamation at KFM focused primarily on waste rock piles. We restored 520,000 square meters through grass seeding, with 4,500 kilograms of seeds sown. At TFM, reclamation of tailings storage facilities (TSFs) and waste rock dumps follows an annual plan. For newly constructed TSFs,

efforts have centered on covering outer dam slopes with topsoil and sowing grass seeds, promoting revegetation while mitigating hydraulic erosion.

At our Brazil operations, we continuously update mine reclamation plans and carry out land grading, soil covering, drainage construction, and vegetation planting to restore waste rock piles, TSFs, and solid waste disposal sites.



In 2024, we reclaimed 222.5 hectares of land, including 54.1 hectares of forest and shrubland, and 136 hectares of grassland. This was achieved through the planting of 380,000 saplings and 53.5 tonnes of grass seeds.



## Biological Diversity



Mining operations inherently disturb ecosystems before restoration begins, making biodiversity conservation a key focus of CMOC's environmental management. In 2024, we updated our *Environmental Policy* to further define our commitments to biodiversity. CMOC is dedicated to minimizing adverse impacts on biodiversity and ecosystems and aims to achieve no net loss of biodiversity across its operational areas. We follow internationally recognized good practice to manage the areas of potential environmental sensitivity and high biodiversity value identified as being impacted by our operations. Under the *Environmental Policy*, we will progressively develop implementation measures and establish a core indicator framework to improve data collection, monitoring, and evaluation.

All our operations assess nature reserves, ecological reserves, and rare species of flora and fauna to identify ecological sensitivities and evaluate the status of biological resources in operational areas. These assessments also help determine the

potential impacts of project development. To achieve no net loss of biodiversity, we apply a tiered management approach based on four key strategies: avoidance, mitigation, restoration, and offsetting. Where necessary, we also develop biodiversity management plans.

These biodiversity initiatives align with environmental impact assessment requirements under the regulatory frameworks of the countries where we operate. At TFM and KFM in the DRC, CMOC also follows internationally recognized frameworks, including the International Finance Corporation (IFC) Performance Standard 6 on Biodiversity Conservation and Sustainable Management of Living Natural Resources. All mature CMOC mining operations have site-specific environmental policies and biodiversity risk identification procedures.

In China, we conduct comprehensive biodiversity risk assessments before initiating new projects, in compliance with

local regulations. These assessments include identifying sensitive ecological areas and quantifying biomass loss. During ecological restoration, we implement diverse species recovery and ecological compensation measures to preserve biodiversity.

At TFM, biodiversity conservation efforts focus on copper flora, plant species adapted to the region's naturally high metal concentrations. Over the years, TFM has established nurseries, greenhouses, and seed banks to support the preservation, propagation, and research of these species. Cultivated copper flora is transplanted into reclaimed areas to ensure species continuity. In 2024, we assessed three artificially restored ecosystems and confirmed no loss of copper flora. Additionally, laboratory-propagated and transplanted species have contributed positively to species diversity. TFM has now successfully conserved and restored approximately 40 species of copper flora.



At KFM, we engaged a third-party ecological assessment to establish baseline biodiversity data and develop a restoration plan, providing the foundation for future biodiversity conservation efforts. In 2024, we conducted biodiversity assessments during both the dry and rainy seasons, carrying out sampling surveys of plant and animal species. These assessments identified and refined multiple habitat units to evaluate habitat integrity, species diversity, and vegetation structure dynamics, covering approximately 3,100 hectares.

In Brazil, our operations are located in the Cerrado savannah biome and the Atlantic Forest biome, areas which are particularly rich in biodiversity. In view of our responsibility to

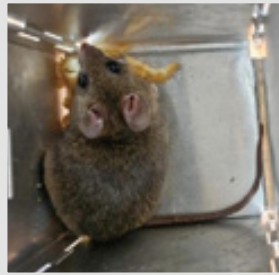
protect the local environment and biomes, we continued wildlife monitoring efforts in 2024 in partnership with local universities. With support from the Goiás State Secretariat for Environment and Sustainable Development (SEMAD), we funded and participated in the Cerrado Mammal Conservation Program, led by the Federal University of Catalão (UFCAT). This program gathers ecological, epidemiological, genetic, and conservation data on the Cerrado's biodiversity, with a particular focus on wild carnivores. As part of this initiative, researchers deployed 61 camera traps across three designated study areas, recording 6,691 instances of animal activity. In addition, GPS radio collars were used to track the movements and spatial ecology of large carnivores.



Biodiversity survey photos from KFM



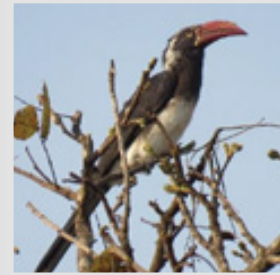
Gambian Sun Squirrel (*Heliosciurus gambianus*) LC



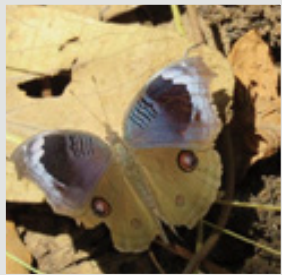
House Mouse (*Mus musculus*) LC



Green-backed Woodpecker (*Campethera maculosa*) LC



Crowned Hornbill (*Lophoceros alboterminatus*) LC



African Pansy (*Junonia artaxia*) LC



Blister Beetle (*Hycleus senegalensis*) NYBA



Sharp-nosed Grass Frog (*Ptychadena oxyrhynchus*) LC



Brown House Snake (*Boaedon fuliginosus*) LC

## Resource Management



CMOC is committed to the responsible use and management of resources and the minimization of waste generation. We recognize the value of responsible stewardship of these elements to our business and the communities in which we operate. In 2024, we continued to improve production management in line with our stated goals of increasing recycling rates across our operations and promoting the energy transition.

### Water

The activities associated with mining operations have the potential to impact water resources. For example, the dewatering of open-pit mines can cause local groundwater levels to drop, leading to a potential risk of water shortages in neighboring communities. Wastewater from production processes may pose surface water and/or groundwater pollution risk if not properly treated. Ore dressing and smelting also require large amounts of water, which may cause tensions with local communities. CMOC attaches great importance to water resource risks. The latest version of our *Environmental Policy*, which was published in 2024, enshrines a new commitment to water resources:

*CMOC is committed to the protection of local surface and groundwater systems. We operate in compliance with applicable laws and regulations and work to minimize adverse impacts on water from our operations. CMOC conducts ongoing monitoring of water use and quality in the areas where we operate to prevent water contamination, protect regional groundwater security, and ensure that local communities have reliable access to clean water.*

*We take a prevention-first approach to water pollution control. Wastewater is classified and collected based on its characteristics, with priority given to direct recycling or reuse to minimize discharge. We are committed to protecting drinking water sources and require all wastewater to be*

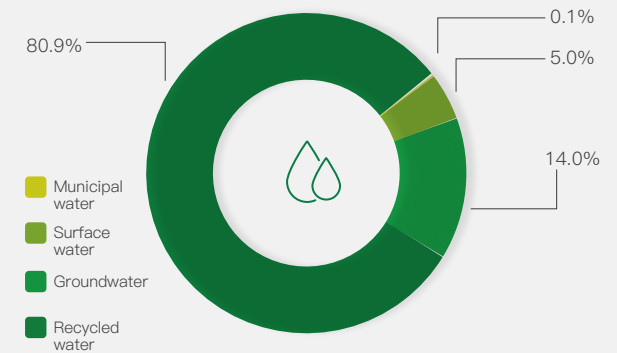
*treated and discharged in accordance with standards to reduce its impact on the water environment.*

*CMOC promotes water conservation, including through recycled water use and reduced water-use intensity. We continuously refine our water management techniques and strategies, leveraging technological innovation, water monitoring programs, stormwater controls, and other physical or procedural systems to reduce freshwater usage and safeguard surface and groundwater resources.*

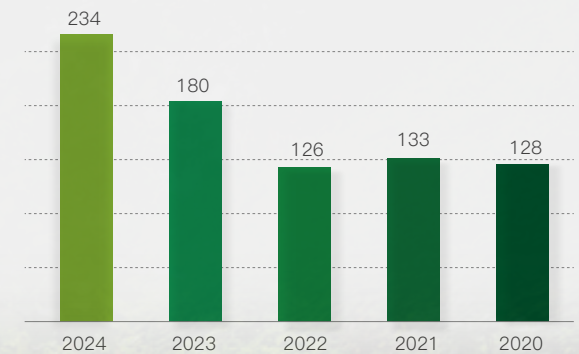
In 2024, we continued to improve water management practices across all our operations with reference to the water stewardship criteria of the RRA. Utilizing methods such as hydrogeological surveys, water resource surveys, risk registers for pollution sources, and numerical simulations, we analyzed existing and potential water resource risks, and on this basis, developed targeted mitigation measures for each mining site.

To conserve water resources, we have set a Group-wide target to increase the proportion of recycled water to 83% of total water usage by 2025. In 2024, we used a total of 234 million cubic meters of water, of which 80.9% was recycled, equivalent to a water use intensity of 3.959 cubic meters per tonne of processed ore. Water consumption increased significantly compared to last year mainly because TFM’s East Plant has officially started operations. Water use intensity also increased, primarily due to the divestment of Northparkes Mine in Australia whose figures are no longer included in calculations, and a prolonged dry season at our Brazil operations, which reduced water recovery rates. To achieve our water recycling target, we will continue to implement a series of water conservation measures across all our operations, including expanding water storage facilities, optimizing water-intensive processes, and enhancing water reuse strategies.

Water use by source (%)



Total water use (million cubic meters)



At our Chinese operations, we have implemented a number of measures to reduce the risk of wastewater discharge and increase water recycling rates, including optimizing water discharge routes and utilizing existing wastewater collection tanks to collect and reuse mine drainage for mineral processing. At our mineral processing plants, crusher cooling water is reused, saving nearly 5,000 cubic meters of freshwater each year. In addition, the extraction workshop at our tungsten facility has installed a reverse osmosis system to recycle wastewater, reducing freshwater usage by almost 30,000 cubic meters per year.

At our KFM operation in the DRC, we have improved the treatment of open pit water by installing a new six-stage sedimentation system comprising two three-stage sedimentation basins positioned inside and outside the pit. We have also installed six sedimentation basins next to waste rock piles, which have a combined capacity of 20,000 cubic meters and will help to reduce the downstream impact of mine drainage.

At our TFM site, rainwater runoff is separated from wastewater into large collection basins positioned downstream of storm drains. As a result, most rainfall can be collected and reused, which increases the proportion of recycled water. To contain surface runoff, we have constructed retaining walls along the boundaries of waste rock piles and installed drainage channels to collect and purify rainwater.

At CMOC Brasil, upgrades of granulation and acidification equipment at the Cubatão plant have increased the average wastewater reuse rate from 19% to 27% – equivalent to almost 1 million cubic meters of water savings.

## Energy

Large-scale mining and metallurgy require significant amounts of energy. We obtain energy directly through the burning of coal, diesel, gasoline, natural gas, and biofuels, as well as indirectly through purchased electricity generated by hydropower, thermal power stations, and renewable sources. In addition, our mining sites take advantage of every feasible opportunity to improve energy security and safeguard the availability of affordable and reliable energy. This includes prioritizing renewables and low-carbon energy when seeking new sources of energy, and delivering continuous improvements in energy efficiency.

Due to the expansion of our operations, CMOC's total energy consumption rose from 5,800,000 MWh in 2023 to 7,170,000 MWh in 2024, an increase of 24%. Total energy intensity increased by 17% to 0.121 MWh per tonne of processed ore, primarily due to growth in stripping volumes associated with the expansion of production capacity and higher consumption of TFM's East Plant during the commissioning phase. Direct energy consumption accounted for 54.1% of total energy consumption, with indirect energy consumption accounting for 45.9%. In terms of direct energy consumption, 79.1% was sourced from diesel and 6.4% from renewable sources. Renewable sources such as hydropower and solar power accounted for 71.4% of our indirect energy consumption.

Under the company's expansion plan, we are committed to using more energy-efficient production methods to reduce energy intensity per unit of processed ore. We will ensure that at least 40% of our overall energy consumption is sourced from renewables by 2025, both by increasing the use of clean energy sources such as solar and hydropower, and by retrofitting our mining machinery. In 2024, with renewable sources accounting for 36.2% of overall energy consumption, we did not meet the

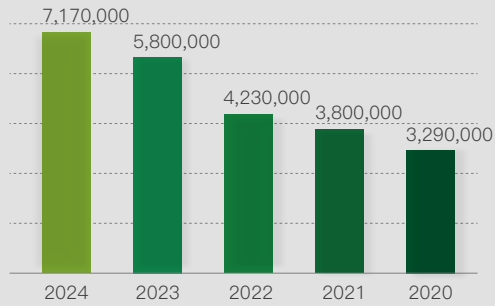
target. This was mainly due to higher stripping volumes in the DRC with the expansion projects, resulting in increased fossil fuel use such as diesel, and the use of imported thermal power in the DRC due to shortage of local hydropower supply.

At our Chinese operations, we use innovative technology to reduce energy consumption, encourage the use of renewable energy sources, and drive the energy transition. For example, to improve the efficiency of our dust suppression system, we refined work areas to reduce the extent of spraying and installed two new refill stations for water trucks, halving refill distances from 6 kilometers to less than 3 kilometers. This improvement translates to annual fuel savings of almost 200,000 kWh. At our mineral processing facilities, we have cut electricity consumption by 5.5 million kWh by optimizing tailings pipelines, while at our smelting facilities, the gas heating system has been retrofitted with a condenser to capture and reuse residual heat, increasing energy efficiency by 10%.

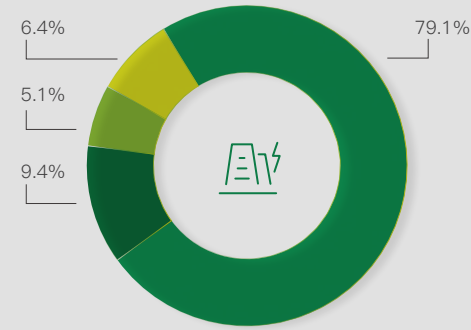
At our TFM operation and CMOC Brasil, we continue to generate electricity using residual heat recovered from sulfuric acid plants, producing 35 GWh and 47 GWh in 2024, respectively. In October 2024, TFM's east plant cogeneration system was successfully integrated with two sulfuric acid plants, increasing generation capacity by 15 MW.

At CMOC Brasil's Cubatão plant, we have implemented a diverse range of measures to reduce energy consumption, such as installing high-performance, energy-efficient LED lights, variable frequency drives, and enhanced motor insulation.

Total energy consumption (MWh)

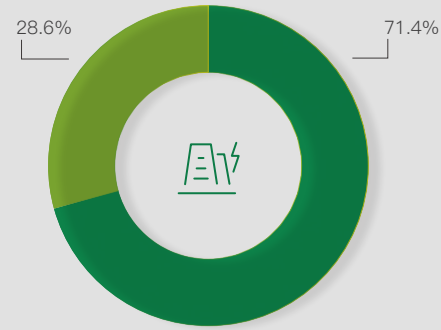


Direct energy consumption by source (%)



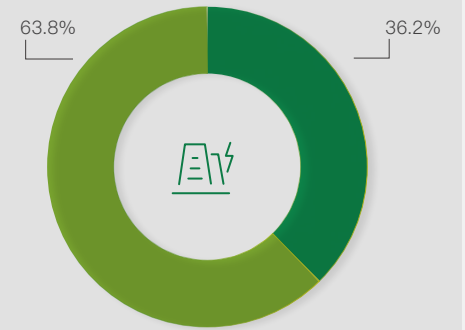
- Liquid fuels
- Gaseous fuels
- Coal
- Other renewables, cogeneration, etc.

Indirect energy consumption by source – Purchased electricity (%)



- Renewables
- Non-renewables

Total energy consumption by source (%)



- Renewables
- Non-renewables



## Emission and Waste Management



CMOC is committed to reducing the discharge of pollutants and waste, as well as mitigating the environmental impact of emissions, by continuously improving its environmental management system. We implement appropriate control measures to ensure compliance with relevant laws, regulations, and emission standards in the countries where we operate, as well as international laws.

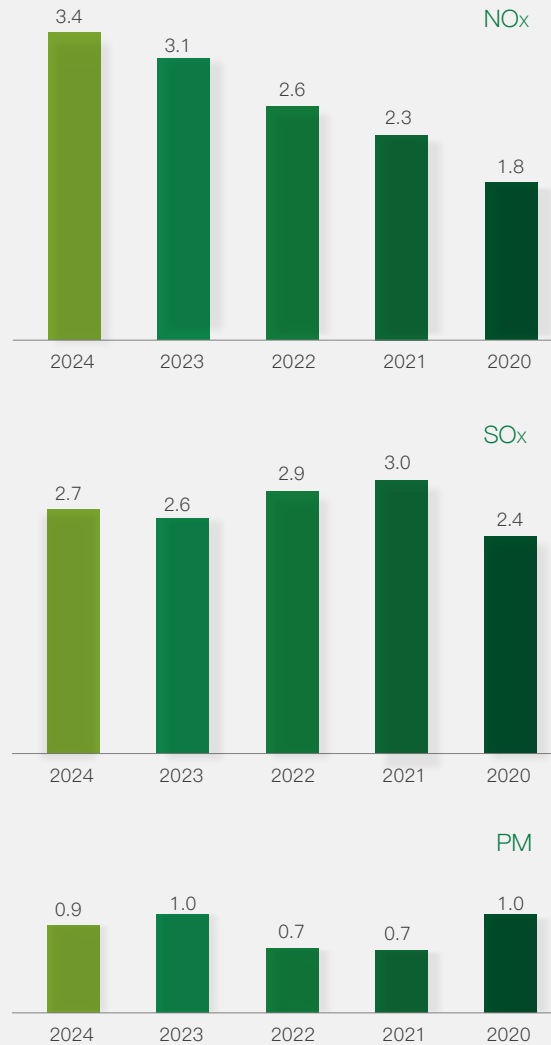
In 2024, we received two environmental penalties totaling RMB 156,000 (approx. US\$21,860) for minor violations at our Brazilian operations, primarily due to non-compliance with water discharge standards.

### Air quality

Mining involves various activities that generate air pollutants, which have the potential to pollute the surrounding environment and community. Emissions of particulate matter typically originate from drilling, blasting, loading/unloading, crushing, screening, and transportation on unpaved roads. Nitrous oxide emissions primarily come from haulage vehicles, construction vehicles and industrial furnaces that use traditional fuels, while sulfur oxide emissions mainly originate from sulfuric acid production processes, roasting processes for sulfide minerals, and industrial furnaces that use traditional fuels.

Due to the expansion of our operations and the associated increase in stripping and processing volumes, our nitrous oxide and sulfur oxide emissions increased slightly compared to 2023.

Total airborne emissions (kilotonnes)



For atmospheric emissions, our target for 2025 is to reduce the emissions intensity of nitrous oxides by 5% and sulfur oxides by 2% on 2020 levels through a combination of equipment upgrades, new energy sources, and improved processes. In 2024, the emissions intensity for nitrous oxides was  $5.752 \times 10^{-5}$  (tonnes per tonne of processed ore), which represents a slight increase on 2020 levels due to the increase in gasoline and diesel consumption driven by higher stripping volumes in our DRC open-pit mines. In response, we will continue to adopt electrification measures and NOx control technologies to improve our performance. Thanks to a series of measures implemented over the course of 2024, the emissions intensity for sulfur oxides decreased to  $4.568 \times 10^{-5}$  (tonnes per tonne of processed ore), which is in line with our target.

The main concern at our mining operations is the emission of particulate matter such as dust. We use wet suppression, dust collection, water spraying, and other preventive measures in dust-generating processes, and implement control measures for road dust, such as surface treatments, regular road maintenance, and speed limits to minimize the generation of dust.

For sulfur oxide emissions, we have replaced coal with natural gas to reduce emissions at source. At our sulfuric acid plants, we use highly efficient catalysts to maximize SO<sub>2</sub> conversion, and have installed high-performance scrubbing systems.

Nitrous oxides mainly originate from vehicles and the combustion of traditional fuels. We reduce nitrous oxide emissions from vehicles through regular maintenance, enhancing operating conditions, and periodic replacements. In addition, we have replaced traditional energy sources with cleaner alternatives such as natural gas, wood chips, and biodiesel.



In 2024, our Chinese operations continued to implement a range of measures to reduce airborne emissions, including:

- Lowering drilling rig discharge points and installing dust covers to suppress dust from drilling activities.
- Retrofitting the spraying system at crushing stations with adjustable pressure nozzles and atomized sprays, which have reduced dust levels by 95%.
- Implementing an online monitoring and four-tier control system at our tungsten facility to monitor furnace emissions. No abnormal emissions were detected over the course of 2024.
- Switching to an improved, highly efficient catalyst at our smelting facility, which has increased the SO<sub>2</sub> conversion rate to over 95% (versus 92% previously).

At our Brazil operations, particulate matter from waste rock piles is controlled with water spraying and timely reclamation measures. We have also installed pollutant monitoring devices, both within our mining sites and in neighboring communities, to continuously monitor trends in airborne pollutants.

At our KFM operation in the DRC, we have continued to improve the monitoring of ambient air quality. In 2024, we installed and commissioned five online monitoring stations to track ambient air quality and noise levels in real time, including concentrations of numerous common pollutants, which will enable us to better protect the environment and public health.

At our TFM site, we continue to implement a series of measures to combat air pollution. Ambient air quality in the operating area and other sensitive surrounding areas has been monitored for many years. Within the mining site, water trucks are used to spray roads and suppress dust, while during the annual dry season, roads are treated with natural, environmentally-friendly dust suppressants.

## Waste Management

Mining, processing, and smelting generate large amounts of waste rock and tailings, as well as various types of industrial waste. In addition, the communities who live and work at our mining sites generate domestic waste. Without proper disposal, this waste can contaminate soil, groundwater, and surface water. CMOC prioritizes waste management and pollution prevention, as reflected in the following commitment from

the latest version of our *Environmental Policy*, released in 2024:

*CMOC implements systems to ensure compliance with local and international environmental regulations related to waste management in the regions of our operations. Additionally, CMOC strives to continuously improve its waste management process in line with good practice and sets relevant requirements to define, monitor, and manage waste at all our operations to prevent harm to people and the environment.*

*CMOC is committed to managing all waste safely and responsibly by applying a waste mitigation hierarchy across all waste types. Our waste management systems prioritize avoidance, reduction, reuse, recycling, and recovery, with safe and non-hazardous disposal as a last resort, while ensuring that waste disposal does not lead to secondary pollution.*

Our main waste product is tailings and waste rock from processing and mining activities. In 2024, our global operations generated 58 million tonnes of tailings and 355 million tonnes of waste rock. Compared with 2023, the amount of tailings and waste rock increased, primarily due to an increase in output driven by higher stripping and processing volumes. The company manages this waste in accordance with applicable laws and standards. Waste storage facilities are designed and built to minimize risks pertaining to slope stability, geochemical hazards, health and safety, and environmental impact.

Other waste generated at our operations is classified into non-hazardous and hazardous waste. We manage waste from our business activities to minimize the amount that requires disposal. We treat waste on site with approved equipment, and also transport it off site for recycling, storage, or disposal. In addition, we continue to improve waste recycling rates, reduce our environmental impact, and promote the circular economy by recycling scrap metal from mining sites, recycling waste smelter dust, and reducing and recycling hazardous waste. In 2024, CMOC generated 78 kilotonnes of non-hazardous waste, of which 64.7% was recycled; and 58 kilotonnes of hazardous waste, of which 42.9% was recycled.

Waste	2024 amount (kilotonnes)	Density (tonnes per tonne of processed ore)	Recycling rate	Waste category
Non-hazardous waste	78	1.320x10 <sup>-3</sup>	64.7%	Scrap metal; household waste (disposable goods, kitchen waste, office paper, etc.); ferromolybdenum slag; coal cinder; sulfur cake; calcium slag.
Hazardous waste	58	9.812x10 <sup>-4</sup>	42.9%	Used oil, hydrocarbon/water emulsion; acid sludge; mud; spent catalysts; waste oil drums; tungsten slag.

At our Chinese operations, we continue to develop innovative waste management strategies to promote the circular economy. For example, we have developed a comprehensive tailings recycling technology to recover a range of associated minerals such as tungsten, iron, and copper, effectively reducing the volume of tailings produced by our operations. At our tungsten facility, we have launched a new recycling project that will enable us to recycle 20% of phosphate slag. In August 2024, CMOC China signed a new cooperative agreement with the China Academy of Building Research — a leading research institute for the Chinese construction industry — to explore the use of tailings as a subgrade material and promote the repurposing of tailings for diverse purposes.

At KFM, we have implemented numerous measures to improve recovery rates and reduce waste rock volumes, such as retrofitting thickeners, optimizing ore supply and blending, and improving on-site management. At TFM, scrap cutting plates and track shoes from maintenance activities are repurposed to repair machinery and temporary construction materials, which reduces both costs and solid waste generation.

At CMOC Brasil, we continue to optimize solid waste sorting methods and management systems. By assigning code numbers to different categories of saleable waste, including metal, wood, waste oil, intermediate bulk containers, and empty packaging, we have developed a systematic approach for waste sorting and disposal, generating approximately R\$620,000 (US\$115,000) in additional annual revenue.



## Climate Change



In 2024, we updated our *Environmental Policy* to set out our commitments on climate change. These commitments are based on the goals outlined in our *Climate Change Vision* (published in 2021) and *Carbon Neutral Roadmap and Action Plan* (published in 2023), and also include a new climate adaptation strategy:

*CMOC supports the goals of the Paris Agreement, which include limiting the increase in global average temperature to 1.5 degrees Celsius above pre-industrial levels, in line with the ambitions set out by the Intergovernmental Panel on Climate Change (IPCC). We recognize our responsibility to contribute to the global effort to achieve the goals of the Paris Agreement by reducing our own operational emissions footprint.*

*CMOC is committed to achieving peak Scope I and Scope II emissions by 2030 and reaching net-zero Scope I and Scope II emissions by 2050. Meanwhile, CMOC will work to continuously reduce its Scope III emissions.*

*CMOC is committed to achieving its net-zero goal through energy efficiency, electrification, renewable energy, and carbon capture and storage. We will promote energy efficiency technologies at all levels of processes to reduce energy consumption; increase the proportion of electrification and renewable energy to reduce dependence on fossil fuels and achieve energy transition; and apply available carbon capture technologies to achieve net-zero emissions.*

*In addition to our climate change mitigation strategy, CMOC commits to actively pursuing comprehensive climate change adaptation strategies that will enhance resilience across our operations. By integrating climate adaptation into all planning and policy-making processes, investing in resilient infrastructure, and promoting sustainable management of our natural resources, CMOC will be better equipped at managing climate risks and impacts to operations and communities. Underpinning this commitment is our dedication to monitoring, evaluating, and continuously improving adaptation efforts to ensure transparency and accountability.*

In 2024, we continued to pursue the short, medium, and long-term goals of our Carbon Neutral Roadmap and Action Plan, as well as formulate and optimize emission reduction plans for each operating site.

### Short-term goals and action plan (before 2030)

#### Goals:

- Reduce our emissions intensity (per unit of processed ore) by 15% compared with 2022.
- Reach peak emissions by the year 2030.

#### Actions:

- Instruct each operating site to formulate an implementation plan and raise awareness of CMOC's carbon neutral roadmap.
- Progressively implement energy efficiency measures in routine operations.
- Launch pilot electrification and renewable energy projects.
- Assess effectiveness of carbon neutral strategies at each operating site and optimize management strategies.
- Monitor developments in low-carbon technologies and update our technology strategy.

### Medium-term goals and action plan (2030–2040)

#### Goals:

- Deliver a 38% reduction in absolute emissions by 2040 compared with the 2030 peak.
- Deliver a 60% reduction in emissions intensity (per unit of processed ore).

#### Actions:

- Continue to implement energy efficiency measures in routine operations.
- Launch large-scale electrification and renewable energy projects (e.g. solar, wind, and hydropower).
- Require contractors to use zero-carbon and low-carbon technologies.
- Continue to assess the effectiveness of carbon neutral strategies at each operating site and optimize management strategies.
- Monitor developments in low-carbon technologies and update our technology strategy.

### Long-term goals and action plan (2040–2050)

#### Goals:

- Deliver a 67% reduction in absolute emissions by 2045 compared with the 2030 peak.
- Achieve carbon neutrality by 2050.

#### Actions:

- Continue to implement energy efficiency measures in routine operations.
- Introduce stringent criteria to require contractors to use zero-carbon and low-carbon technologies.
- Continue to assess the effectiveness of carbon neutral strategies at each operating site and optimize management strategies.
- Continue to implement electrification measures and renewable energy projects (e.g. solar, wind, and hydropower).
- Monitor developments in low-carbon technologies and update our technology strategy.
- Use carbon capture and storage technologies to capture residual emissions.

## Greenhouse Gas Emissions

To achieve our short-term goals, each mining site has formulated its own *2030 Carbon Peak Implementation Plan*, which identifies emission reduction opportunities and sets out a timeline for implementation. We have also developed targeted performance indicators for each mining site to promote awareness and action on reducing emissions across all departments. Our China, Brazil and TFM operations have rolled out a number of emission reduction projects in accordance with their respective implementation plans, meeting all their annual performance indicators in 2024. This year, KFM also formulated its *2030 Carbon Peak Implementation Plan*, under which it plans to launch around 40 emission reduction projects over the coming years to reduce the emission intensity of its operations.

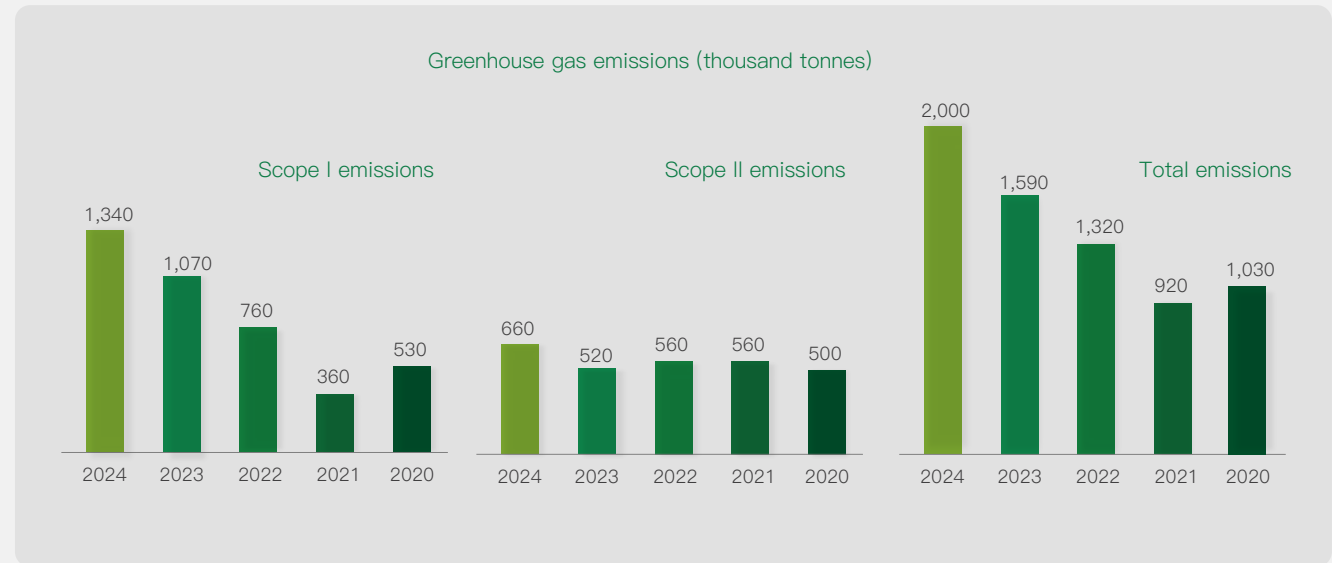
Specifically, across all our mining sites, we continue to promote energy-efficient technologies and increase the level of electrification; increase green power generation through centralized and distributed photovoltaic projects and the construction of hydropower stations; and encourage the use of biodiesel, natural gas, biomethane, and other clean energy sources to reduce reliance on traditional energy sources. At our Chinese operations, we have opened a new digital energy and carbon management center, which monitors energy use and provides real-time data on carbon emissions to support energy conservation and carbon reduction efforts. At TFM, we completed the first life cycle assessment of the site’s copper and cobalt products, quantifying carbon and various other environmental footprints throughout the product life cycle, identifying opportunities for improvement, and providing data support for supply chain due diligence in the renewable energy sector.

In 2024, our scope I and II greenhouse gas emissions measured on a CO<sub>2</sub>-equivalent basis were approximately 2,000,000 tonnes, which equates to an emission intensity of 0.034 tonnes per tonne of processed ore. As outlined in our *Carbon Neutral Roadmap*, we are committed to reducing our emission intensity by 15% by 2030 compared with 2022. In 2024, our emission intensity was higher than 2022 levels, primarily due to changes in calculation scope following the divestment of Northparkes Mine in Australia, as well as continued growth in capacity at our African mining sites, where local power shortages necessitated the use of imported thermal power.

In 2024, our Scope I direct GHG emissions, which are primarily from diesel, coal, and natural gas, totaled approximately

1,340,000 tonnes. Diesel is mainly used to power mining machinery and haulage fleets across our mining sites. Most of our coal consumption is attributable to the quicklime plant at our TFM site in the DRC, while natural gas is mainly used to fire furnaces at our Chinese operations and dry product in Brazil. Due to increased mining and processing volumes at our TFM and KFM operations, our total Scope I direct GHG emissions increased significantly compared with 2023.

Our Scope II indirect greenhouse gas emissions, primarily from purchased electricity, rose by 27% year on year in 2024, reaching approximately 660,000 tonnes. This increase was mainly due to greater reliance on imported thermal power at our African mining sites to offset local power shortages.



In 2024, we also engaged an internationally renowned sustainability consultancy to calculate our Scope III emissions. The calculation was conducted in accordance with the recommendations of the *GHG Protocol Corporate Accounting and Reporting Standard* and the *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*. The organizational boundary of this exercise is consistent with that of the 2024 annual report.

According to the results, the primary sources of scope III emissions in our mining operations are the processing of sold products, the procurement of goods and services, and upstream transportation and distribution. We are currently developing value chain decarbonization plans, including prioritizing the procurement of low-carbon goods and services, increasing the share of clean energy in transportation, and encouraging employees to use public transportation for business travel and commuting.

During the reporting period, the Group’s Scope III greenhouse gas emissions were as follows:

Category	Emissions (tonnes CO <sub>2</sub> e)
1. Purchased Goods and Services <sup>2</sup>	665,239
2. Capital Goods	11,489
3. Fuel and Energy-Related Activities	326,116
4. Upstream Transportation and Distribution	623,411
5. Waste Generated in Operations	8,721
6. Business Travel	6,657
7. Employee Commuting	22,606
8. Upstream Leased Assets	NA
9. Downstream Transportation and Distribution <sup>3</sup>	6,474
10. Processing of Sold Products	1,800,424
11. Use of Sold Products	NA
12. End-of-Life Treatment of Sold Products	11,506
13. Downstream Leased Assets	59
14. Franchises	NA
15. Investments	207,613
<b>Total Emissions</b>	<b>3,690,315</b>

Our trading company IXM also continuously measures and assesses its carbon footprint. It quantifies a partial scope of its Scope III GHG emissions arising from IXM trades and business travel. Based on its trades, IXM retrieves the carbon emissions data using an external carbon accounting platform. This analysis includes trade-by-trade evaluation along with asset- and supplier-level performance assessments against carbon emission industry benchmarks. IXM’s Scope III inventory is publicly disclosed in IXM’s ESG report, available on the website: <https://www.ixmetals.com/>.

### Emission Reduction Initiatives

Guided by our climate vision and the commitments outlined in our *Carbon Neutral Roadmap and Action Plan*, in 2024, we have implemented and refined a broad range of projects to reduce our carbon emissions, including energy efficiency, electrification, and renewable energy initiatives.

#### Energy efficiency

At TFM, we have optimized haulage routes to reduce transportation distances and installed a 6-kilometer conveyor belt to reduce fuel consumption. At our Chinese operations, we have completed a large-scale initiative to replace energy-intensive machinery with energy-efficient green alternatives, delivering around 5,000 tonnes in emissions savings.

#### Electrification

At our Chinese operations, we have acquired a fleet of electric trucks, loaders, and other equipment to pave the way for the roll-out of our Group-wide electrification strategy. In 2024, our Sandaozhuang mine continued to acquire electric haulage trucks. Currently, we operate a fleet of 132 electric vehicles, which account for over 93% of our haulage fleet.

<sup>2</sup>Scope III emissions in Category 1, 10, 11 and 12 associated with third-party volumes (non-CMOC products) traded by our trading company IXM are not included in the Group’s emissions reporting, because our trading activities of third-party products do not result in the generation of additional Scope III emissions in these Categories associated with the transformation or consumption of these products.

<sup>3</sup>As the company is not able to obtain the information about the transportation organized by our clients, the related greenhouse gas emissions are not included in the Category 9 "downstream transportation and distribution".

### Renewable energy

In the DRC, we signed a cooperation agreement with the local power company Lualaba Power SA to support the development of the new Nzilo II hydropower project, which is scheduled to generate 200 MW of electricity through a combination of solar and hydropower and will make a significant contribution to alleviating local power shortages. At our Chinese operations, we installed a rooftop solar power system with an annual generation capacity of 2 GWh, while at our tungsten facility, we converted coal-fired furnaces to natural gas, delivering 16,000 tonnes in emissions savings as well as a reduction in coal use. In 2024, our Chinese smelting plant retained its place on the list of “Green factories” issued by the Henan provincial government.



Electric unmanned trucks.

## Risks and Opportunities of Climate Change

To advance climate action and increase transparency in climate-related disclosures, we implemented a series of measures based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). As part of this effort, in 2024, we systematically identified and assessed climate-related risks and opportunities and developed a response plan.

Building on this work, in 2025, we updated the physical risk assessments for all mining sites using the latest climate data from external databases. We also conducted a quantitative analysis of key climate-related risks and opportunities to assess their potential financial impact on the company. For more details, please refer to the CMOC 2024 TCFD Report, annexed to this report.

Our major climate-related risks and opportunities fall into two categories:

1. Transition risks and opportunities associated with the shift to a low-carbon economy.
2. Physical risks arising from the physical impacts of climate change.

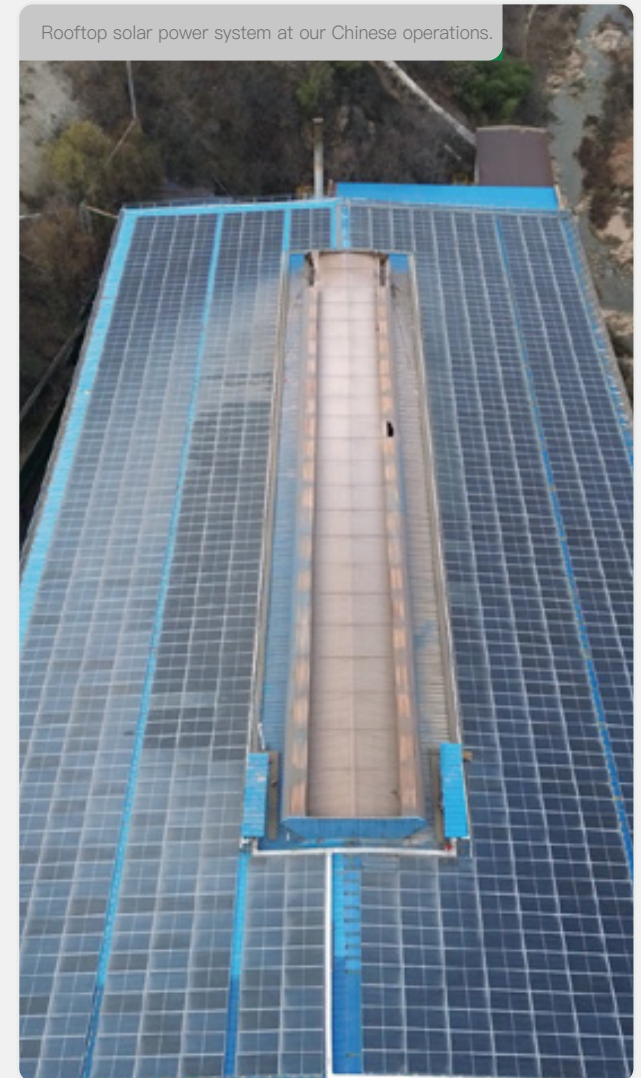
Transition risks primarily stem from increasingly stringent climate disclosure requirements, more ambitious emissions policies, and heightened regulatory scrutiny. Uncertainty in market signals may also impact our business operations.

On the other hand, transition opportunities primarily include potential revenue growth driven by the increasing demand for low-carbon products and services, as well as long-term cost advantages resulting from energy substitution and diversification.

Overall, we expect the financial impact of transition risks to be relatively minor, while transition opportunities are likely to generate significant positive effects in the medium to long term. This is largely attributable to our climate strategy, which aims to reduce exposure to policy and regulatory risks while strengthening our resilience to climate change.

To assess physical risks, we use climate models to simulate potential scenarios and quantify the climate value-at-risk (CVaR) for our assets in both the medium and long term. Current assessments indicate that our exposure to physical risks remains within a manageable range.

CMOC has incorporated climate-related risk management into its Group-wide risk management procedures and conducts biannual assessments to identify, assess, and manage climate risks. Through this process, we identify the climate-related risks and opportunities facing the company, assess the potential scale and scope of major risks and opportunities in order to better understand potential climate-related impacts, and incorporate them into our business strategy. This enables us to develop and implement effective risk mitigation measures to enhance our climate resilience and proactively seize climate-related opportunities.



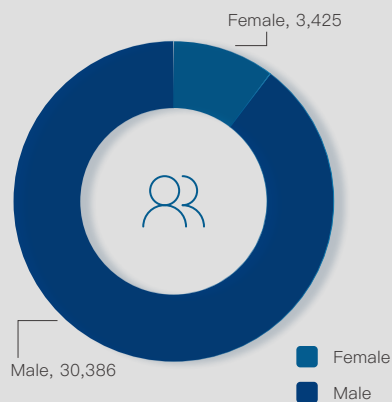
Rooftop solar power system at our Chinese operations.



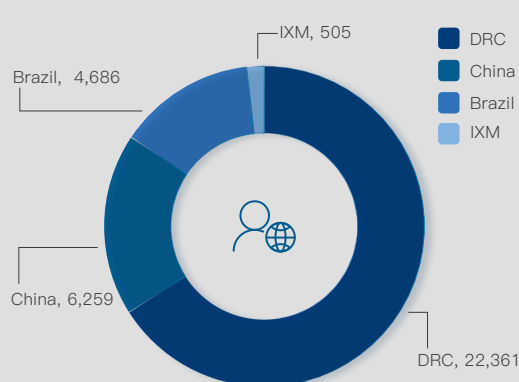
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Number of employees and contractors by gender

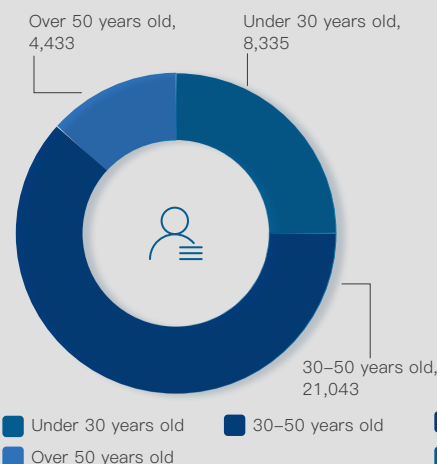


Number of employees and contractors by region (1)

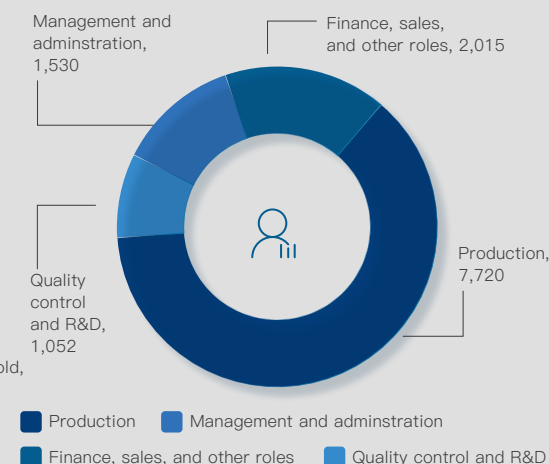


(1) IXM is active throughout the entire network of the global metals and minerals industry, including teams based in Geneva, Shanghai, Johannesburg, and Connecticut, and also has offices in major Latin American producing countries such as Mexico, Peru, and Chile.

Number of employees and contractors by age



Number of employees by job category



At the close of the 2024 reporting period, CMOC had 12,317 employees across its operating sites and management offices, as well as 21,494 contractors. Approximately 10.1% of the workforce was female. 24.7% of the workforce was under the age of 30, 62.2% was aged between 30 and 50, and 13.1% was over 50. 62.7% of CMOC employees were employed in production, 8.5% in quality control and R&D, 12.4% in management and administration, and 16.4% in finance and sales roles.

The company's *Employment Policy* applies to CMOC and all of its directly or indirectly controlled global subsidiaries, and outlines the company's commitments in terms of fair employment, comprehensive remuneration schemes, career development, freedom of association and collective bargaining, and employee communication. CMOC is committed to ensuring that the needs of employees and wider society are met during the growth of the company. This involves establishing harmonious labor relations, respecting and upholding employees' rights and interests, and pursuing diverse, open and

inclusive employment policies that respect local culture and customs and give employees access to equal career opportunities irrespective of nationality, race, gender, religion, or cultural background. CMOC values communication with its employees. The grievance mechanisms provided by the Group and each of its operations are available to all employees and contractors, and employees and contractors are encouraged to provide feedback.

In our labor relations, CMOC aims to comply with the requirements of ILO Conventions and local labor laws and regulations, and to establish fair employment mechanisms. Although some sites do not operate under collective bargaining agreements, all 12,317 employees in our worldwide operations have the right to freedom of association and collective bargaining. In 2024, 7,157 members of our global workforce (58%) were covered by collective bargaining agreements, including all employees at our CMOC Brasil, TFM, and KFM operations. Collective bargaining agreements are developed in consultation with union leadership and include provisions which

stipulate that further consultation is required in the event of modifications to operating schedules that impact employees. At all of our sites, we provide employees with market-based wages and benefits in accordance with legal requirements, including health insurance, life insurance, and maternity leave.

As part of our remuneration and incentive system, we conduct annual and semi-annual performance appraisals to assess and monitor organizational and individual performance for all employees, and offer a diverse range of incentive schemes including operational, project-based, and long-term incentives. We endeavor to ensure a fairer and more objective appraisal process, focusing on assessing progress toward the company's goals and the quality of employees' work. For general staff and departmental managers, individual performance is directly linked to organizational performance to encourage employees to contribute to the company's growth.



## Safety



To encourage good ESG practices across all levels of management and our wider workforce, our procedures for assessing organizational performance include a range of ESG metrics that take into account the local circumstances of each operating site. In 2024, these metrics included emissions reduction targets, employee and contractor training, stakeholder engagement, community development, human rights due diligence, and other important ESG topics.

In 2024, we continued to enhance our comprehensive incentive policies to improve organizational efficiency and encourage better management practices, including targeted incentives tailored to the needs of each operating site. At our Chinese operations, we introduced two new incentive schemes for managers who exceed profit targets or deliver increased recovery rates. At our KFM and TFM operations in the DRC, we rolled out performance-based incentives to reward staff who meet production targets or achieve significant cost savings, while at CMOC Brasil, a new incentive scheme was launched to motivate employees to contribute to cost savings and efficiency gains.

CMOC strives to provide a safe and healthy working environment for its employees and is committed to maintaining fair labor relations, promoting equality, and making continuous improvements to its career development framework. In 2024, the overall turnover rate among CMOC staff and contractors was 25.4%. Among staff, the turnover rate was 7.8%. Among contractors, the turnover rate was 32.7%, primarily due to the change of labor contractor at CMOC Brasil, and the departure of contractor workers as the construction activities at TFM extension project were gradually coming to an end.

CMOC's HSE, environment, and community policies reflect our commitment to preventing harm to employees and reducing negative impacts on the environment and local communities. We are also dedicated to strengthening our HSE systems through practical actions and initiatives, maintaining adherence to HSE-related procedural documents such as the *Group HSE Handbook* and the *Emergency Response Measures*. In 2024, all mining sites successfully achieved ISO 45001 certification.

In 2024, our key priority was to enhance the comprehensiveness and efficiency of our HSE management systems. Guided by the Group-level HSE Committee, we addressed deficiencies identified during previous verifications of our safety management systems. This included issuing the 2024 HSE priorities, renewing goals such as "zero fatalities" and "zero new occupational diseases," signing HSE performance contracts with each business unit, formulating the *Rules for the Organization and Operation of the HSE Committee*, and convening quarterly HSE Committee meetings across the Group. Additionally, we developed and implemented procedural documents such as the *HSE Golden Rules* and the *Accountability Measures for Incidents*.

Regrettably, at our TFM site, we were not able to achieve our goal of zero work-related fatalities in 2024, with five contractor fatalities recorded. These tragic incidents included: a haul truck losing control downhill and crashing into a slope, resulting in the driver's death; a contractor drowning while working near a raw water tank in the central processing plant; a drill operator buried and killed in a slope collapse; an operator crushed to death while replacing a filter plate in a press-filter workshop; and a contractor fatally struck by a runaway forklift. All the other operations achieved the goal of "zero fatalities".

Following these incidents, senior Group management convened emergency meetings to inform all business units of the circumstances, report preliminary findings, and share lessons learned. Root cause analyses were conducted at TFM, and

corrective measures were implemented to address management deficiencies. The Group headquarters also dispatched a dedicated team to the TFM site to carry out HSE diagnostics and propose targeted recommendations for improvement in areas such as the management of high-risk jobs, HSE leadership, delineation of roles and responsibilities, handover procedures, risk assessments for commissioning activities, the reporting of HSE incidents, and employee feedback. These measures were progressively implemented on-site. Measures outlined in the *CMOC HSE Accountability Management Measures* were enforced to ensure accountability for those responsible, and adjustments were made to TFM's management structure. The Group HSE Committee also appointed the Group HSE Director to provide on-site support, and TFM underwent ISO re-certification audit to assess the effectiveness of its HSE management system. Recognizing the profound impact of workplace fatalities on employees and their families, and to ensure a continuous improvement in our HSE management and performance, we are committed to a thorough reflection at all levels of management and to fully implementing the detailed and constructive recommendations from the reviews and audits.

To prevent future tragedies, the Group has launched the 2025 "Zero Fatalities Action Plan." Key initiatives include optimizing the HSE performance assessment system to increase leadership focus on major accident prevention; implementing a "Leadership Accountability Program," that requires business unit leaders to disclose actionable safety leadership records; launching a Group-wide "Safety Month" to engage all employees in improving risk management; promoting standardized team-building practices from our Chinese sites to strengthen frontline risk control; and refining the HSE organizational structure within business units to ensure clear accountability at the production level and effective contractor oversight.





In 2024, our Chinese operations continued to improve its HSE framework. Throughout the year, we promoted the adoption of standardized safety practices across work teams by refining organizational structures, clarifying roles, and implementing rotational training to enhance frontline teams' self-management capabilities. We also optimized safety protocols, streamlined standard operating procedures, and introduced innovative training methods, leveraging visual tools to reinforce compliance.

Additionally, we strengthened oversight through the use of electronic work permits, safety barriers, and AI-based monitoring technologies. In 2024, we invested over RMB 30 million in key technological advancements, including unmanned haul trucks, intelligent drilling equipment, remote-controlled crushing stations, digital mining networks, and visualization systems. These efforts are aimed at driving the mechanization, automation, and smart operation of our mines, further enhancing their intrinsic safety. We also organized initiatives such as family open days, injury simulation workshops, health and safety cartoons, and hands-on training sessions to further enhance employees' safety awareness.

As a new mining operation, KFM completed the development of its HSE management procedures in 2024, clearly defining HSE accountability. It also strengthened HSE digitalization efforts by

centralizing the management of hazard identification, incident reporting, and training records, delivering a notable improvement in data analysis and application capabilities. Standard operating procedures for mining and smelting facilities ensure the effective performance of the site's slope stability and drainage systems, and the site has advanced wastewater separation facilities that reduce the overall pressure on safety and environmental management. In 2024, KFM also organized emergency drills, safety exhibitions, case studies, knowledge competitions, and the "Safety Star" awards to foster a positive safety culture. In November 2024, the KFM site achieved ISO 45001 certification for the first time.

CMOC Brasil continued to demonstrate robust HSE performance in 2024. In the NOSA Five-Star Audit, our niobium and phosphorus HSE systems saw significant improvement, earning five- and four-star ratings, respectively—up from four and three stars in the previous year—demonstrating our position as a regional leader in HSE management. Employees demonstrate strong safety awareness and high levels of participation, with safety performance remaining a top priority at all levels of management. Building on this foundation, in 2024, we further strengthened proactive risk prevention measures, implemented a leadership action plan covering senior, middle, and frontline management, and enhanced HSE leadership training. We also conducted comprehensive risk

assessments to precisely identify potential hazards, and developed and implemented targeted control measures. In addition, we reinforced our safety inspection mechanisms by increasing the frequency of inspections and expanding coverage, ensuring that all workplace hazards are promptly identified and effectively addressed.

IXM implemented its own HSE policies and took additional steps to improve safety, including risk control measures for high-risk warehousing operations, tailored management policies, and contractual agreements defining partners' safety responsibilities. In 2024, IXM enhanced workplace safety by equipping forklifts with LED safety barriers, remote monitoring systems, high-resolution CCTV, and SCADA technology.

Safety performance at CMOC is measured according to established benchmarks, such as our Total Recordable Incident Rate (TRIR) and Lost Time Injury Rate (LTIR). In 2024, CMOC reported 63 recordable incidents from a total of 88,818,920 hours worked, equating to a TRIR of 0.71 per million hours worked. There were 16 lost time injuries, equating to an LTIR of 0.18 per million hours worked. There were also 600 lost days due to work injury and 5 fatalities. Year-on-year safety performance trends can be found in the appended Data Overview.

## Occupational Health



Across all our global operations, we have established comprehensive mechanisms for managing occupational health, including the identification and mapping of occupational health hazards, prioritizing the elimination or mitigation of occupational health hazards at source, implementing automation and mechanization strategies to reduce exposure times, and introducing technical measures during production to mitigate hazards. For all employees and contractors, we mandate the use of personal protective equipment, including appropriate respirators for individuals engaged in high-risk activities. In addition, we monitor the health of employees before, during, and after their period of employment or prior to their transfer to another post to prevent occupational diseases and ensure they are in a fit state of health. All employees undergo regular occupational health checks, with their health status systematically recorded in a personal occupational health file.

Dust and hazardous gases are the primary threats to employee health, and originate from drilling, blasting, ore loading and transport, crushing, and other production processes. To reduce employees' exposure to dust, our mitigation efforts include the wetting or treatment of roads in mining and ore transport areas, and increasing the automation of ore transportation, crushing, and packaging processes. To address the potential risk of sulfur dioxide (SO<sub>2</sub>) leaks at sulfuric acid plants and smelting facilities, we have implemented a three-tier detection and early warning system. Multiple SO<sub>2</sub> detectors—both fixed units and portable gas monitors—are installed at workstation, facility, and plant-wide levels, ensuring timely alerts if concentrations exceed thresholds for intervention.

Chronic exposure to noise from transportation, crushing, and milling of ores is another threat to employee health. In light of these risks, we monitor and map noise levels next to major sources of noise, install warning signs to inform employees of occupational health hazards, implement technical measures such as the installation of vibration- and noise-reducing systems and sound-proofed rooms, and provide employees

with appropriate hearing protection based on their level of exposure, including ear plugs and ear defenders.

We also prioritize the mental health of our employees and contractors, a commitment which is enshrined in our *Responsible Production and Sourcing Policy*. At our Chinese operations, dedicated mental health hotlines are available to support employees suffering from work-related stress or mental health issues. At CMOC Brasil, we support the Janeiro Branco mental health awareness campaign by providing employees and their families with free and confidential mental health counseling. IXM held its "Wellness Week" campaign for the fourth consecutive year, which encourages employees to prioritize both their physical and mental well-being.

In 2024, we continued to improve occupational health management across our global operations. At our Chinese operations, we installed new machinery, optimized management procedures, and enhanced emergency response mechanisms. Specific measures included the installation of 28 additional sound-proofed rooms and 37 dust collection systems, 36 training sessions covering occupational health topics (attended by 4,894 people), 48 emergency response drills, and the elimination of 35 occupational hazards. These measures delivered a notable reduction in exposure, with 92% of occupational hazard tests meeting the required standards.

In 2024, our TFM and KFM operations in the DRC focused on improving occupational health policies, including the introduction of standard operating procedures for occupational health training, health examinations, and the monitoring, communication, and prevention of occupational hazards. We continued to implement measures such as identifying occupational health hazards, conducting qualitative and quantitative tests, providing occupational health and safety training courses, and ensuring the strict implementation of the *Employee Health Examination Plan*.

CMOC Brasil also continued a range of measures to safeguard the physical and mental well-being of its employees and comprehensively prevent occupational diseases. These include regular comprehensive health examinations and monitoring for employees in high-risk roles, strengthening training programs to enhance employees' hazard awareness, and continuously improving workplace health and safety measures to ensure full compliance with relevant standards. In addition, CMOC Brasil proactively supports the mental health of its employees by encouraging them to avail of on-site health management and mental health counseling services. Each month, it organizes diverse health-focused initiatives, such as Blue November for prostate cancer awareness, Pink October for breast cancer awareness, and White January for mental and emotional health.

At our Chinese processing facility, we have introduced a range of measures to minimize dust exposure, such as optimizing dust collectors, unblocking pipes, modifying gravity valves, sealing dust-prone sections of belts and machinery, and improving wet dust suppression techniques. As a result of these measures, concentrations of particulate matter have dropped significantly to 28 µg/m<sup>3</sup>.



## Employment



CMOC is committed to offering a diverse, open, inclusive, and trusting workplace that respects the rights of employees, ensures equal employment, and promotes fair competition and personal development. We develop our employment policies, such as working hours and workforce rights, in accordance with local labor laws and ILO conventions, and foster a corporate culture that aims to promote the career development of our employees.

### Labor Relations

In accordance with CMOC's *Employment Policy*, we respect the rights of all employees, and strive to provide an environment that ensures fair treatment and decent working conditions. The company has a compensation program that provides employees with a salary and benefits that are consistent with market standards and relevant laws and regulations, including but not limited to pension, medical, and unemployment insurance plans as required by regional and national governments. We set working hours and holiday entitlements according to the law or collective bargaining agreement that applies in the relevant jurisdiction. Employees have access to internal grievance mechanisms through which they can report and resolve workplace complaints or concerns. We make continuous improvements to our labor policies and seek innovative approaches aimed at enhancing industrial relations.

Our *Employment Policy* recognizes our employees' rights to freedom of association and collective bargaining. At our TFM site in the DRC, all employees are represented by 11 major DRC trade union organizations and covered by a collective bargaining agreement. Dedicated onsite mailboxes are provided by unions in order to collect employee concerns and grievances. The company management maintains close contact and holds quarterly meetings with union representatives to discuss employee and company concerns. In 2024, we provided specialist training for union representatives and contractors covering topics such as union participation, mediation, and other related skills. In addition, all employees were reminded of

their right to freedom of association and collective bargaining as part of our routine induction and refresher training.

KFM is committed to continuously improving labor relations by creating fair and transparent working conditions in which employees are able to express their opinions and concerns. To this end, the company has formulated the *KFM Employee Communication Channels* procedure, installed dedicated mailboxes, and appointed on-site employee relations officers to log and respond to feedback from employees. We have also established a solid partnership with two of the largest local trade unions, with whom we hold quarterly and annual meetings to discuss labor issues, promote collective bargaining, and safeguard employee rights and interests. In August 2024, KFM signed a new collective agreement with trade union representatives. The company has also implemented the *KFM Cultural Integration Policy* and publishes an in-house magazine in Chinese and French to strengthen cross-cultural communication, enhance employee cohesion, and reinforce KFM's corporate culture.

At our Chinese operations, all employees are members of trade union organizations and enjoy equal access to the benefits and protection afforded by membership. We also conduct satisfaction surveys, install onsite mailboxes, and use a range of other convenient methods to encourage employees to provide feedback, which is processed in a closed-loop mechanism.

In September 2022, CMOC China launched a RMB 5 million employee assistance fund to assist employees with unforeseen medical expenses. As of 2024, the fund has provided a total of RMB 4.92 million in financial assistance to 585 employees. The company has also built 16 staff recreational areas equipped with a wide range of leisure, entertainment, and study facilities, including reading corners, table football areas, yoga spaces, and fitness equipment.

At CMOC Brasil, material issues are stipulated in the collective bargaining agreement negotiated with trade union organizations and explained clearly to all employees. In 2024, we continued to promote our "CMOC MAIS pelo" app, which provides a transparent and convenient platform for employees to share images and videos, access news and information about the company, and interact with colleagues. We also launched *InterVoices*, a new in-house magazine featuring company news, contributions from employees, and updates from the local community.



## Equal Employment

In keeping with the principle of equal employment, CMOC recruits and hires personnel through various means including open and competitive recruitment, and provides diversified and equal career development opportunities for employees. As stated in the *Employment Policy, Human Rights Policy*, and procedures at our operating sites, we do not tolerate any discrimination on the basis of race, ethnicity, religion, gender, age, sexual orientation, gender identity, or other factors. We also adhere to the principle of fair employment and make employment decisions based on genuine job requirements, including remuneration, training, and promotion.

CMOC values workforce diversity and strives to offer an inclusive workplace. We practice local hiring and diversity in recruitment to support local employment, and cultivate talent to help build a more sustainable local economy. We respect different cultures and encourage exchanges and communications between locations and departments. At our Chinese operations, we support the employment of people with disabilities and have implemented a disability policy to protect the rights of employees with disabilities and ensure they receive the same pay as their non-disabled peers. CMOC China currently employs around 100 people with disabilities, and has been designated as a “CSR Leader” by the Henan Provincial Government. At our TFM site in the DRC, we continued to implement the *Policy on Safeguarding Vulnerable Groups* to identify and protect employees from vulnerable groups, such as people with disabilities, women and expectant mothers, young workers, immigrants, and workers with medical constraints.

In the DRC, which suffers from a high rate of unemployment, we include in our efforts community-based recruitment to help local people find stable employment opportunities. At our TFM operation, the human resources department works closely with the community department to advertise vacancies and organize village recruitment fairs aimed at encouraging local residents to apply for positions within the company. We also encourage

contractors to conduct community recruitment in accordance with our company procedures, and provide employment opportunities to TFM scholars to encourage them to pursue a career within the company. In 2024, the TFM community department helped a total of 1,004 local residents to secure stable employment. At our KFM site, we issued clear regulations on issues ranging from local recruitment channels and methods to workforce composition and the safeguarding of employees’ rights, ensuring compliance with the requirements of ILO conventions. In 2024, KFM continued to organize recruitment campaigns through a combination of community events, job fairs, and recruitment agencies, creating 283 permanent and contract jobs for local residents.

CMOC is committed to gender equality. We treat male and female employees equally, safeguard the health, safety, and wellbeing of all employees, promote women’s career advancement by enhancing their education and training, and raise community awareness through community programs and campaigns. Across all our global operations, we support and encourage innovations and efforts to promote equality and diversity. Notably, at our Chinese operations, women account for 23.9% of the workforce and 45% of managers – significantly higher than the global industry average in a sector that is traditionally regarded as male-dominated. This is mainly attributed to high education level of women, especially in STEM subjects, strong training program and fair promotion mechanism in the company. In light of these achievements, we will endeavor to apply good practices to our other operations in order to increase the number of women in our workforce and senior management positions.

At our TFM operation in the DRC, we have established a Women’s Committee, and in 2024 we updated our *Gender Equality Policy* to stipulate company policies on a broad range of issues concerning gender equality, such as discrimination, sexual harassment, equal pay, training opportunities, promotion

and career development, reproductive rights, baseline surveys, KPIs, and gender equality projects. We also organized training sessions for all levels of management to raise awareness of the company’s gender equality policies. In addition, TFM continued to encourage young women to pursue a career in the mining industry. In February 2025, the Women’s Committee visited Lupeto School in Fungurume, where female employees from a wide range of fields including geology, electrical engineering, chemistry, and metallurgy shared their experiences of working in the mining sector and encouraged young women to study STEM subjects.



In 2024, TFM geologist Nahomie Tshikadi received the “Rising Star Award” at the Association of Women in Mining in Africa (AWIMA) Leadership Awards for her contributions to the mining industry.

In 2024, our KFM operation continued to implement its *Gender Equality Policy* and established a new Women’s Committee to underscore the company’s commitment to gender equality, support the career development of female employees and protect their rights, and provide a forum for women to discuss issues of concern. In October 2024, the KFM Women’s Committee organized a breast cancer awareness session to raise awareness of breast cancer among female employees, including the importance of screening and self-care.

Gender equality is also a priority at our Brazilian operations. In 2024, the company joined Women In Mining Brasil (WIM), an organization dedicated to expanding and strengthening women’s participation in the mining industry. CMOC Brasil

adopts a range of measures to promote gender equality, such as inclusive vacancy notices with images of women, and prioritizing female candidates for strategic positions to increase the proportion of women in the company’s workforce. In 2024, 46% of the employees participating in career development training courses were female, a significant increase on the previous year. The company also held an online seminar on gender equality together with the TFM human resources team and Women’s Committee. During the seminar, colleagues from both mining sites shared best practices and discussed strategies for promoting gender equality, covering topics such as female leadership, women’s empowerment, benefits for female employees, and health-related projects.

## Training and Career Development

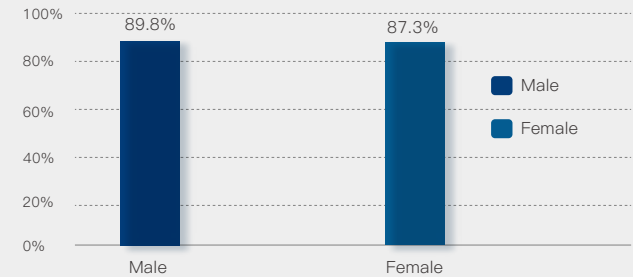


In accordance with the *CMOC Employment Policy*, to broaden firm-wide internal exchanges, we operate a differentiated talent development program that provides our employees with in-house training, rotation across mines, incentive-based development plans, and internal mobility channels based on recruiting, internal competitive selection, and referral. Guided by people-oriented principles and the strategy of the Group, we offer multiple paths for career development with space, tools, and opportunities for growth.

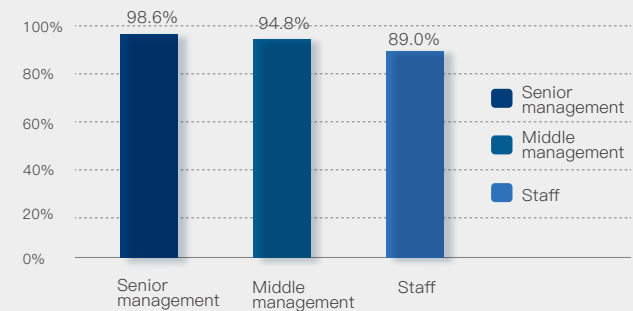
In 2024, 89.6% of CMOC’s workforce received training, with each employee receiving an average of 28.8 hours of training.



Percentage of employees who received training by gender



Percentage of employees who received training by job category



In 2024, the Group HR department organized a range of targeted training programs for different grades of staff in order to support career development, share best practices, and improve organizational effectiveness. Specifically, we have incorporated the following measures into our talent development and training framework:

- As part of our global management trainee program, we introduced needs-tailored, modular training courses to equip talented university graduates with essential technical and management skills and help them to become competent, highly motivated, and internationally-minded leaders. In 2024, 114 graduates with degrees in mining, processing, metallurgy, supply chain logistics, and other relevant subjects were admitted to our management trainee program and assigned to positions across our global network of operations.
- We launched a new Leadership Development Program (LDP) to foster seamless collaboration, enhance strategic vision, and develop a high-caliber management team. In 2024, 50 Group senior executives and senior and middle managers from across our operations completed courses on a broad range of topics, including “8 Dimensions of Leadership,” “Business Acumen,” and “Organizational Development.”
- In collaboration with leading vocational colleges in China, we provided Chinese language courses and technical training for local employees from our overseas operations. In 2024, the inaugural cohort of 60 Congolese employees from the TFM site completed welding training, enhancing their technical skills.

To strengthen ESG expertise across the Group and enhance cross-departmental collaboration, the ESG Department hosted a week-long ESG Annual Conference in Shanghai and Luoyang in 2024. The event brought together community, environmental, and ESG team members from TFM, KFM, CMOC Brasil, IXM, and our Chinese mining operations. Participants shared best practices and key lessons from ESG initiatives, toured leading companies in China, and attended expert-led training on risk management, ESG standards and trends, and stakeholder expectation management. In addition, external experts delivered specialized training on risk management and ESG standards for headquarters employees.



In August 2024, colleagues from CMOC global operations participated in our ESG Annual Conference to exchange experiences.

At our Chinese operations, we continued to enhance our training systems to help employees develop professional skills and competencies. In 2024, we set training objectives for five key employee groups: fresh graduates, management personnel, engineering and technical staff, skilled workers, and new employees. Our training programs follow a tiered and targeted structure, incorporating diverse formats such as online and offline learning, case-driven instruction, hands-on simulations, and a blend of in-house training and external exchanges. These initiatives aim to cultivate a highly skilled, professional workforce and ensure a robust talent pipeline for the company’s long-term growth. Over the course of 2024, 100% of employees at our Chinese operations participated in at least one training program.

At our TFM operation in the DRC, we have developed a comprehensive training system, supported by 50 professional

trainers. In 2024, a total of 16,765 employees and contractors participated in training, equivalent to 94.4% of the total workforce. All employees, including contractors, are required to complete induction and annual refresher training. Our training covers ESG-related topics, such as safety, occupational health, environmental protection, human rights, the Voluntary Principles on Security and Human Rights (VPSHR), anti-corruption, and business ethics. In addition, employees receive technical and skills training, covering topics such as forklift operation, language skills, high-risk jobs, computer literacy, and leadership development. To raise awareness of workplace rights and ethical standards, in 2024, we distributed pamphlets to all employees, including contractors, covering topics such as child labor, forced labor, freedom of association, discrimination and harassment, gender equality, working hours, wages, and grievance mechanisms.



At KFM, we continue to enhance training management, offering induction, refresher, skills, and compliance training. The refresher training program has been expanded and enriched to cover a broad range of topics, including safety and occupational health, anti-corruption, environmental protection, human rights, community relations, and healthcare. Training is offered in both Chinese and French and incorporates written assessments to ensure a thorough evaluation of employees' knowledge. Over the course of 2024, 100% of employees and contractors participated in at least one training program.



At the KFM laboratory, Congolese team leader Greg conducted a training session to enhance the skills of lab technicians. Using illustrated examples, he analyzed common mistakes, highlighted key precautions, and helped improve both technical proficiency and testing accuracy.

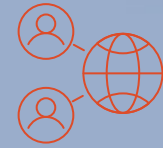
In 2024, our Brazil operations continued to expand the UniCMOC corporate university platform to further strengthen employees' continuous learning and career development opportunities. Tailored learning pathways have been developed for employees in different roles: 1)The Leadership Program consists of three core modules — leadership skills, strategic culture, and people management — covering 24 topics to help managers enhance their leadership capabilities; 2)The New Leadership Program is aimed at key employees and equips them with essential skills for transitioning into management roles; 3)The Intern Learning Program runs for 12 months and includes six in-person sessions, covering topics such as emotional intelligence, communication, and teamwork; 4)For the Apprenticeship Program, we have introduced a job rotation plan and a specialized training curriculum to help apprentices gain a deeper understanding of company operations while developing their skills. In addition, CMOC Brasil also provided training on operational skills, cybersecurity and Chinese language.



2024 apprentice onboarding training at our Brazilian operations.

At IXM, the training catalog has been integrated into the company's HR system, making it accessible to all employees. Currently, it contains 146 training modules in various formats, covering a wide range of topics including industry knowledge, skills and certification programs, and courses on corporate culture. In 2024, we introduced an online course on responsible sourcing for all employees, reinforcing our commitment to

a responsible metals supply chain. Additionally, we offer personalized training programs tailored to different employee needs and host regular in-person group training sessions and lunch-and-learn events to ensure employees stay up to date with industry trends and skills. In 2024, 97.2% of IXM employees participated in training programs, accumulating over 7,000 training hours.



# Community

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In March 2024, CMOC updated its *Community Policy*, which is applicable to all of the Group's operations. The updated policy enshrines new commitments on stakeholder engagement, community health and safety, community development, and indigenous rights with a view to providing better guidance for our community work. We are committed to identifying and mitigating negative community impact risks, making long-term positive contributions, and establishing partnerships based on mutual trust at all levels of community from local to national, and supporting the achievement of the United Nations Sustainable Development Goals (SDGs).

At CMOC, we believe that stakeholder engagement based on mutual trust and transparent dialog is material to the success of our business. We are committed to strengthening engagement, increasing representation of local communities, and monitoring community feedback and concerns through multiple channels so that we can effectively mitigate the adverse impact of our operations while strengthening our positive contributions. We use long-term community investment strategies and development projects to implement community priorities, develop infrastructure, support health, safety, and education efforts, and provide local employment and business opportunities to empower communities.

Community investment projects at CMOC's international sites are guided by local laws and regulations and seek alignment with international good practice frameworks such as the RRA and Performance Standard 5 of the International Finance Corporation. Community engagement and investment activities may also be governed by commitments made through environmental and social impact assessments or their equivalents under national regulations. At our Brazilian and DRC operations, our community work is primarily guided by stakeholder engagement centered on community risk and impact management. Community engagement also enables us to identify community priorities and develop tailored investment plans. At our Chinese site, our community work is closely aligned with national rural development strategies as well as

local government and community development priorities. Through this work, we endeavor to consolidate China's achievements in poverty alleviation, stimulate socio-economic development, and promote cultural enrichment.

Our Chinese operation is located in Luanchuan, Henan province, a remote mountainous county with rich mineral resources. Despite being officially removed from China's list of impoverished counties in 2019, the area is still relatively underdeveloped. As one of the largest companies in Luanchuan county, we live up to our social responsibility by making a long-term contribution to local development. As of 2024, our multi-year investment programs have cumulatively contributed over RMB 240 million (US\$33.6 million) in donations to the county for local infrastructure, economic development, education, health, the environment, and other causes. Currently, the community work of our Chinese mining operation is focused on consolidating previous achievements in poverty alleviation and supporting China's national "rural revitalization" strategy. We continue to donate to educational and environmental causes, and provide targeted assistance to Xiaohe village by supporting local tourism and agricultural produce, creating new job opportunities, and strengthening oversight of community development projects.

In the DRC, our TFM operation is located near rural villages, agricultural land, and two towns which have experienced significant population influx and rapid urbanization in recent years. According to current estimates, the population of the urban and rural areas within TFM's 1,500 km<sup>2</sup> concession is 500,000, which represents a ten-fold increase since the start of the project. The growing migrant population from other poorer regions has had a significant impact on local people's livelihoods, customs, and traditions, while also presenting challenges for our community work. The community programs at this site are aligned with the UN Sustainable Development Goals and aim to address acute community development priorities, complement government development plans, and promote positive relations with community stakeholders while

balancing the limited human and material resources of the company with the needs of the rapidly growing migrant population. In 2024, TFM's community work continued to focus on several key areas, including community liaison activities, health, education and youth development, agricultural and economic development, and infrastructure.



In 2024, we continued to implement the *Cahier des Charges* (*Scope Statement for Community Development*), which was signed by our TFM operation and the local community on January 20, 2021 and commits to investing US\$31 million in community development over a five-year period, targeting priority needs such as health, education, economic development, infrastructure, and telecommunications. In addition, our TFM operation continued to invest 0.3% of net revenue in the Social Community Fund (SCF), which was created through contributions from TFM and responds directly to community determined priorities in the areas of infrastructure, education, health, and agricultural income generation. From its inception in 2009 through December 2024, the SCF has received estimated contributions of US\$81.08 million from TFM, of which US\$12.25 million was given in 2024. At the end of 2023, in accordance with the requirements of the DRC Mining Code, stewardship of the TFM Social Community Fund was handed over to DOT-TFM, a new management committee headed by public and administrative bodies with TFM and local communities participating as joint members.

Our KFM mining site in the DRC occupies an area of approximately 20 km<sup>2</sup>. Consequently, there are fewer local communities that are impacted by our operations than TFM. Community work at KFM is aimed at establishing positive partnerships with the local community based on mutual trust and respect, improving local livelihoods, and building community resilience. KFM also employs a dedicated community engagement team, operates a community grievance mechanism, and actively responds to issues raised by the community. Like other mining companies in the region, KFM is also grappling with an influx of migrants in the area surrounding its mining concession, which presents social, economic, and environmental risks for the local community. In 2024, KFM conducted human rights due diligence to assess salient human rights risks for all stakeholders. Based on risk assessment, KFM completed stakeholder analysis, and formulated a comprehensive risk management strategy addressing key areas such as economic development, employment, stakeholder engagement, environmental protection, and regional cooperation.

Based on extensive community engagement and participation, KFM adopted the new *Cahier des Charges* on November 30, 2023. Around 20,000 people stand to benefit from this plan, which commits to investing almost US\$8 million between 2024 and 2028 in projects covering education, health, economic development, energy, and infrastructure. In 2024, KFM began implementing 11 of these projects, which will fund the construction of local infrastructure, support local agriculture and livestock, provide agricultural machinery and equipment, improve health and sanitation facilities, expand access to electricity and clean water, and support education and vocational skills training for young people. KFM also contributes 0.3% of net turnover to the Community Fund in accordance with the requirements of the DRC Mining Code. In 2024, KFM donated more than US\$3.3 million to the Community Fund.

At our Brazilian operations, we continued to strengthen dialog and engagement with key stakeholders and implemented a range of community projects to better respond to stakeholder expectations on key issues. In 2024, we launched a new socio-economic survey, incorporating social and environmental metrics to obtain a better understanding of the area surrounding our operations. This survey will help us to pinpoint stakeholders, optimize our engagement strategies, and inform our future social investments. Currently, the social investment strategy of CMOC Brasil contains a number of priorities, including improving the management of social and environmental impacts; generating economic, social, and environmental value for local communities; contributing to quality of life, social inclusion, and environmental sustainability, and strengthening the company's reputation and social license to operate. Guided by these priorities, CMOC Brasil makes direct investments in neighboring rural communities, and manages urban community projects backed by government tax incentive programs, supporting social inclusion and priority development needs. In 2024, these programs targeted a range of issues including economic development, education and training, community health, culture and sports, sustainable development, diversity, and inclusion.

As a metals trading company, IXM incorporates social investment in its efforts to improve the minerals supply chain. In 2024, it continued to participate in the Better Mining initiative and the Fair Cobalt Alliance to support efforts to formalize artisanal and small-scale mining (ASM) of cobalt in the DRC, as well as to improve the living conditions of local communities that depend on artisanal mining. In addition, IXM and its employees continued to support charitable causes, including through donations of more than US\$1 million to a range of projects organized by 33 charities, directly benefiting over 52,000 people. Members of IXM's global workforce also signed up for volunteer programs to give back to society.



In October 2024, TFM held a handover ceremony for seven projects under its *Cahier des Charges*, inviting government officials, traditional leaders, and community representatives to witness this milestone event.

## Stakeholder Engagement

CMOC's operations are located in diverse settings where cultural and economic conditions can vary greatly. Proactive and inclusive engagement with stakeholders near our operations is a common practice in successful community relations, mitigating social risks related to our operations, and maintaining our social license to operate. Through a diverse range of engagement channels, we encourage engagement with all types of stakeholders including local government agencies, traditional leadership, community groups, industry associations, non-governmental organizations (NGOs), the media, and individuals that may have a broad array of interests in our operations.

We develop stakeholder mapping and structured engagement plans, establish multi-stakeholder committees, and define systematic procedures for multi-stakeholder engagement, which constitute important channels for communicating with and collecting feedback from local communities. Community engagement committees have been established by our operations in Brazil and the DRC. Another important tool in maintaining effective community relations are our systems for logging and responding to community concerns, identifying social risks, and mitigating negative impacts. Through our grievance systems, we log and respond to community grievances concerning the local environment, health and safety, social investment, human rights, resettlement and land acquisition, and the recruitment of employees. All of our operations maintain systems for receiving and registering community concerns, which are then tracked through the stages of being addressed and resolved.

In 2024, our Chinese operations streamlined stakeholder engagement processes, prepared a stakeholder map, developed a community engagement plan, and provided training for relevant departments. We maintain close and longstanding relations with local stakeholders such as the local authorities

and community members, and provide a community grievance mechanism that plays an important role in facilitating engagement with the local community. Staff are regularly trained to ensure that the mechanism operates effectively. When local residents have concerns, our community relations staff verify and address them in a timely manner and communicate the results to local residents. To this end, the company has established a reporting mechanism which requires concerns from employees and the local community to be reviewed and addressed on a monthly basis. An accountability system has also been introduced to ensure that all grievances receive a response from the relevant department. In addition, the company makes regular visits to the local community during holiday periods to distribute daily necessities and learn about the challenges faced by local residents. In 2024, our Chinese operations received an award from Luanchuan county for the ninth consecutive year in recognition of our work to address community grievances.

At our TFM site in the DRC, the company engages with stakeholders on a regular basis in order to better understand their interests, concerns, and goals. TFM's stakeholders include government authorities, chieftainships, village leaders, civil society organizations, and members of urban and rural communities. As the primary means of gaining input on the community's priority development needs, TFM holds quarterly engagement meetings with a wide array of stakeholders at Tenke and Fungurume. In 2024, these quarterly meetings were attended by 409 stakeholder representatives, including 66 local chieftains, providing the company with a platform to inform the community about its mining activities and construction projects, as well as respond to concerns received by the community liaison officers.



In early winter, CMOC China visited and provided support to vulnerable households in Xiaohu Village, Qiuba Township, demonstrating its commitment to poverty alleviation through concrete actions.

TFM also maintains a community liaison department, which staffs permanent liaison offices in the community. Each area has a designated TFM community liaison officer, who is responsible for holding routine meetings with key stakeholders, receiving community input on company actions, and serving as the primary communication channel between local residents and TFM. In 2024, our community liaison officers visited 85 of the 122 villages within the TFM mining concession, where they arranged meetings with local chieftains and engaged with 1,856 villagers, including 558 women. To strengthen engagement with the community, we also recruit volunteer messengers in local villages, who enable the company to monitor and respond promptly to developments within the community. In 2024, this team of volunteers reported around 160 community concerns to our community liaison officers, covering issues such as illegal ASM activities, community recruitment, community sanitation and health, and the implementation of the *Cahier des Charges*.

In addition, TFM organizes consultations and awareness campaigns for specific projects and for issues which are of concern to the community. In 2024, these consultations and campaigns included topics such as the implementation of the *Cahier des Charges*, blasting safety, safety measures around the site perimeter, and community recruitment. TFM's community grievance system is managed by the community liaison department, which employs a dedicated community grievance officer. All community members, including TFM employees, may present grievances related to the impacts of our operations. All grievances are received and tracked by an information management system. Community residents can also participate in the grievance resolution process through an independent mediation committee, 60 percent of whose members are local residents.

Stakeholder engagement is also a key component of our risk mitigation efforts, especially in the context of certain material risks that require multi-stakeholder mitigation strategies. Material risks affecting the local community and TFM

operations include the establishment of new settlements driven by the continued expansion of the two major towns and neighboring villages, posing a threat to the health, safety, and stability of local communities; illegal artisanal miners who congregate in the villages surrounding mining sites, causing disturbance to our operations and social tensions; and an increasing number of opportunists, raising resource constraints and execution difficulties in our resettlement activities. In response, TFM has strengthened its engagement with the local government, community leaders, civil society organizations, industry associations, and other mining companies in order to develop joint strategies for mitigating risks related to in-migration and ASM. In 2024, we also conducted a range of research to assess the social risks within the TFM mining concession, including socio-economic and health surveys, stakeholder analysis, and research on the risk of child labor in ASM communities. Together with our ongoing human rights due diligence, the findings from these surveys will enable us to promote regional development strategies in collaboration with other stakeholders.

At our KFM site in the DRC, the community department has established procedures for day-to-day communications, meetings, and correspondence with nine neighboring villages in order to understand their needs and receive and respond to their grievances. KFM's stakeholders primarily include government authorities, chieftainships and village leaders, local development committees, villagers, and civil society organizations. The community team maintains close contact with stakeholders by making weekly visits to the community and organizing a community meeting at the end of each quarter to discuss the progress of the company's projects, solicit opinions, exchange views on recent developments, and explore solutions for addressing villagers' needs and challenges. In 2024, KFM made 341 visits to the local community and held 144 meetings, which were attended by 4,685 people.

At our KFM site, the *Cahier des Charges* is implemented in close consultation with the local community, ensuring input from a broad range of stakeholders. A Local Development Committee that comprises representatives from the company and the local community holds regular meetings to discuss the progress of implementation and highlight key issues of concern to the community, while a Local Supervisory Committee of local stakeholders is responsible for monitoring the implementation process. In addition, to address the risks posed to the community by in-migration and ensure the success of our investment in the *Cahier des Charges*, we have strengthened engagement with other neighboring mining companies, with whom we hold monthly meetings to discuss risk mitigation measures and the implementation of the *Cahier des Charges*.



In December 2024, TFM held the community development strategy meetings with traditional leaders to better understand their concerns, priorities, and objectives.

Our Brazilian operations continue to value and maintain dialog with various stakeholders, including members of the community, NGOs, media organizations, opinion leaders, industry associations, government authorities, and regulatory bodies. Through our “Alô CMOC” initiative, we provide a range of channels for internal and external stakeholders to contact us, including social media, telephone, and email. Other key engagement channels include face-to-face meetings, house-to-house visits, online consultations, an on-site reception room and bulletin board, interviews with local residents, community grievance mechanisms, training, and awareness campaigns. Our community team also distributes information leaflets and fridge magnets with the company’s contact details.

In 2024, CMOC Brasil organized nine community engagement meetings, which were attended by 217 people. Through a combination of house-to-house visits and online consultations, our community team had 464 interactions with members of urban communities and 1,862 interactions with members of rural communities, totaling 313 hours and 806 hours respectively. The company also attended meetings of the Cubatão Consultative Community Council and liaised with government departments in Catalão and Ouvidor on a regular basis. In addition, we actively engaged with 91 households situated within the TSF emergency evacuation zone in order to raise awareness of evacuation procedures and invite residents to participate in emergency drills.

In 2024, IXM supported several global social impact initiatives, focusing on children’s education, health, and environmental sustainability. The company funded scholarships and health awareness programs in Peru, promoted responsible mineral production in the DRC, and carried out ecological restoration projects in Indonesia, Peru, Colombia, Ecuador, and Tanzania. In December, IXM prepared Christmas hampers in Geneva for vulnerable groups, distributing food, hygiene products, and toys. In Shanghai, the company partnered with a local NGO to fund

medical surgeries for children from financially disadvantaged families and donated toys and meals to support them.

In 2024 Dec, IXM mobilized 250 volunteers in total helped prepare 2,500 Christmas baskets, allowing 9,091 people (4,281 adults and 4,810 children) to have a proper meal, 1<sup>st</sup> need products and toys for the children.

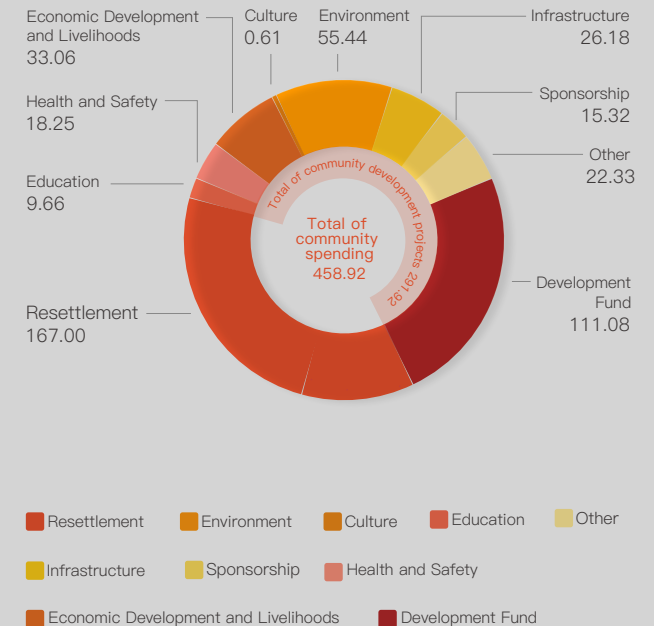


## Community Development

CMOC’s investment approach is based on communities’ priority needs and includes direct investment, contributions to community foundations, participation in government and private sector-led initiatives, and procurement of local products and services. Our community investments are also centered around the United Nations Sustainable Development Goals (SDGs), with a particular focus on Goals 1 (No poverty), 2 (Zero hunger), 3 (Good health and well-being), 4 (Quality education), 5 (Gender equality), 6 (Clean water and sanitation), 7 (Affordable and clean energy), 8 (Decent work and economic growth), and 9 (Industry, innovation, and infrastructure). Investments are typically made in the broad categories of education, healthcare, economic development, infrastructure, the environment, and resettlement. At our TFM and KFM sites in the DRC, implementation of the *Cahier des Charges* is subject to regular inspection by a Local Supervisory Committee; at our Brazilian operations, regulatory authorities conduct an annual audit of our social projects within the tax incentive portfolio. In 2024,

CMOC spent a total of RMB 458.92 million (US\$ 64.31 million) in community related projects, including RMB 291.92 million (US\$ 40.91 million) in community development projects and RMB167.00 million (US\$ 23.40 million) in resettlement.

### Community spending by category (million RMB)





## Education

Support for education from kindergarten through to university is a high priority for our community investment projects. Across all our operations, we support higher and vocational education to improve career opportunities for the younger generation. In 2024, we invested RMB 9.66 million (US\$ 1.35 million) in educational programs worldwide.

CMOC believes that addressing educational needs is the key to promoting regional development. In 2024, we donated a further RMB 2 million to educational causes in Luanchuan county, including helping university students to finish their studies and ensuring that students from low-income families can attend school. Over the past eleven years, CMOC has donated a total of RMB 22 million to educational programs, which have benefited more than 6,700 students from Luanchuan county.

In the DRC, we are committed to expanding access to basic education, reducing dropout rates, and preventing child labor. We also support skills training and vocational education to help address youth unemployment. At TFM, education is a key pillar of our community investment strategy. In 2024, we continued to build local schools and subsidize teachers' salaries and school operations. In addition, we are actively implementing various

projects under the *Cahier des Charges*, including the construction of a vocational school and new educational facilities. TFM is also dedicated to expanding vocational education opportunities for young people. Since 2013, we have awarded annual scholarships to local students admitted to the Technical Institute of Mutoshi. In 2024, 50 students, including 18 female students, received scholarships. Furthermore, TFM supported local community centers by providing training to 149 trainees in skills such as carpentry, tiling, plumbing, and tailoring.

To mitigate child labor in illegal artisanal mining, TFM organized summer camps for 1,675 children, providing structured supervision during school holidays. In partnership with UNICEF, we distributed back-to-school kits to 2,000 children. In addition, we collaborated with international and local NGOs to launch a child labor prevention and remediation program in ASM communities. To date, 17 vulnerable children have been identified and enrolled in a remediation plan, ensuring they return to school and receive appropriate care until adulthood.

At our KFM operation, we launched a new scholarship program in August 2024 in accordance with the latest *Cahier des Charges*, providing financial support to a first cohort of nine local students to pursue vocational and technical education. In addition, 39 individuals from nearby communities participated in various technical training courses, including 19 in heavy machinery operation, 10 in textile work, and one in information technology.

In August 2024, KFM launched a scholarship program for young people from nine neighboring villages, providing access to vocational and technical education.



In 2024, CMOC Brasil implemented a diverse range of educational and training programs for children and young people in partnership with local organizations, covering topics such as fire safety, short video editing, drug abuse and violence prevention, diversity and inclusion, arts, and sports. Aimed at promoting social integration and preventing school dropouts, these programs reached more than 1,570 people, primarily from disadvantaged communities. In addition, we continued to fund the SENAI Program to prepare young people for entry into the job market. In 2024, full scholarships were awarded to five high school students to pursue skills training in 2025.



TFM supports local education by building classrooms, providing facilities, and training teachers.



ICMOC Brasil collaborates with the government and NGOs to provide youth training in arts, sports, fire safety, video editing, and drug and violence prevention.



## Community Health and Safety

Across all our operations, community health and safety is critical to the success of our business. Members of the local community comprise the majority of our workforce, and therefore community health and safety has a direct impact on the stability and productivity of the company’s workforce. Our operations may also result in adverse health and safety risks and impacts for local communities, and constitute a material risk in terms of the potential social and human rights impacts. Recognizing these risks, we have made community health and safety a key investment priority and monitor performance very closely. In 2024, CMOC invested approximately RMB 18.25 million (US\$ 2.56 million) in community-based health and safety initiatives, addressing a range of priority needs.

Due to the lack of medical and healthcare facilities and municipal infrastructure, communities near our TFM operation may face shortage of medical, sanitation, and health services. In recent years, a growing migrant population within the mining concession has further increased the risk of communicable diseases, posing potential health challenges for both local residents and TFM employees. To mitigate these risks and address urgent community health needs, TFM implemented a range of health and safety initiatives in 2024, including completing its community health survey and updating key data, constructing new healthcare facilities, providing skills training for healthcare professionals, enhancing disease surveillance and control, and expanding access to clean drinking water.

In recent years, TFM has continued to monitor the incidence of communicable diseases in local communities, including malaria, HIV/AIDS, cholera, and sexually transmitted infections (STIs), while also raising awareness and supporting efforts to control their spread. In 2024, we implemented several measures to reduce malaria incidence, including:

- Distributing 120,000 second-generation insecticide-treated mosquito nets and antimalarial medication to surrounding communities,
- Spraying 7,368 rooms with mosquito repellent,

- Monitoring 107,448 breeding sites within the mining concession and applying larvicides at all sites where malaria-infected mosquitoes were detected, and
- Operating an insect laboratory that studies the effectiveness of residual insecticides on various wall surfaces and malaria vectors.

TFM continued its support for the “SafeTstop” HIV/AIDS awareness and testing initiative for truck drivers. In 2024, 441 voluntary tests were undertaken and 4.4% of tested drivers were diagnosed as HIV-positive. We also distributed 168,850 condoms to truck drivers.

To strengthen long-term community health and hygiene capacity, we provided:

- Training for 25 nurses on flowchart use, integrated management of childhood illnesses, and treatment guidelines,
- Training for 26 nurses on the comprehensive management of malnutrition,
- Training for 18 Development and Health Committee members on household hygiene, and
- Training for 18 healthcare workers on STI and HIV/AIDS prevention and management.

Furthermore, TFM supported the local NGO Lamuka in delivering an HIV awareness campaign to approximately 3,222 residents of neighboring communities, including 1,459 high-risk individuals such as sex workers, truck and taxi drivers, and police officers. As part of the campaign, 23,505 condoms were distributed.

In 2024, TFM distributed 120,000 second-generation mosquito nets to support malaria prevention in local communities.



In 2024, our KFM operation continued to fund community health initiatives in the DRC. We donated cholera prevention and control supplies to the Lualaba Provincial Health Zone to help contain outbreaks in surrounding communities, and distributed emergency supplies to the Lualaba Coordination Office of the Red Cross to improve working conditions and operational efficiency for its emergency response teams. To address the lack of medical facilities in Dikanda village, we also constructed a health center that meets the standards of the DRC Ministry of Public Health. The new facility includes a general outpatient clinic, maternity ward, pediatric ward, laboratory, and separate male and female inpatient wards, all equipped with essential medical equipment and medications. This project has significantly improved local healthcare infrastructure and expanded access to medical services for residents.



In Dikanda Village, KFM established a hospital with outpatient, maternity, pediatric, and general wards, as well as a lab, equipment, and medicines.

In 2024, CMOC Brasil continued its community health campaign, providing influenza vaccinations for 124 individuals in 11 rural communities who lacked access to city-based healthcare. In addition, we organized 28 fire prevention training sessions across 10 neighboring communities.



## Environment

CMOC attaches great importance to the protection and continuous monitoring of the natural environment and neighboring communities. In 2024, we invested approximately RMB 55.44 million (US\$ 7.77 million) in environmental research, management, and education to protect local communities and the natural environment.

At our China operation, we donated an additional RMB 5 million to Luanchuan county to support environmental improvement efforts. In 2024, CMOC China established a dedicated task force to prevent pollution at the source of the Yu River. The task force enforces strict pollution controls, implements long-term coordination between upstream and downstream areas, and carries out comprehensive river restoration initiatives. These efforts effectively safeguard water quality and enhance the living environment for surrounding communities.

In 2024, CMOC Brasil repurchased 30,000 saplings from the Family Nursery Program for reforestation and donated an additional 4,500 additional trees to local communities and employees. Our Brazilian operations also continued collaborating with the Federal University of Catalão on a water management research project in neighboring communities. As part of this initiative, we partnered with 55 local farms in Catalão and Ouvidor to install rainwater collection systems and conduct a groundwater impact assessment, with 321 systems installed to date. Meanwhile, the community team continued maintenance work on 12 natural spring wells.



## Economic Development and Livelihoods

The value we create as a company also includes generating economic growth and improving livelihoods for the communities impacted by our mining operations. We strive to help communities become self-sufficient and take charge of

their own development — factors which are important for reducing external pressure and creating a favorable environment for our operations. Therefore, we invest in economic development and livelihood initiatives in neighboring communities. Our programs are directed at building capacity to address economic drivers, such as agriculture and local business development, with a particular focus on economic diversification and building the capacity of local women. In 2024, CMOC invested approximately RMB 33.06 million (US\$ 4.63 million) in projects related to economic and livelihood development.

At our Chinese operations, we donated an additional RMB 8 million to a dedicated charity fund in collaboration with Luanchuan county to support local healthcare, infrastructure, and industrial development. Since 2017, the company has been actively engaged in targeted poverty alleviation efforts in Xiaohe Village, appointing a designated staff member to be stationed in the village and implementing various initiatives to boost local incomes. We have provided significant support in employment security, industrial development, market expansion, and brand building, with a particular focus on rural homestays and tourism, chrysanthemum farming, fruit production, and village infrastructure investment. Through initiatives that prioritize supporting local businesses as an alternative to direct financial assistance, CMOC has helped expand market access for Xiaohe's agricultural products, increasing household incomes. Our community team also conducts regular surveys to assess evolving community needs and develop plans to stimulate sustainable development. In recent years, we have also stationed 4 staff in neighboring villages to support local development, introducing advanced management expertise and facilitating access to economic resources. In 2024, the team dedicated a total of 3,000 hours to working with local communities.



In the DRC, agriculture is one of our key investment priorities due to its importance to the local economy and household food security. In 2024, we implemented a range of livelihood projects under TFM's *Cahier des Charges*, including:

- Continuing our maize credit project, supporting 1,677 farmers across 1,500 hectares of farmland. The 2024 harvest yielded 9,675 tonnes of maize, with an average yield of 6.45 tonnes per hectare. The project generated US\$360,000 in revenue, part of which was used to fund the purchase of three trucks for transporting agricultural supplies.
- Donating 122 goats to 38 farming households.
- Distributing 637.5 tonnes of farming supplies, including fertilizers and maize seeds, to 1,677 farmers.
- Supporting and incubating 66 local village savings groups, whose collective savings now exceed US\$140,000.
- Assisting eight local women's associations (cooperatives) in entrepreneurial activities.



TFM supports women's associations with developing local agriculture and livestock farming.



In September 2024, KFM donated three new tractors and agricultural equipment to local communities under its *Cahier des Charges*.

In 2024, KFM provided agricultural and livestock support, along with training programs, to enhance farming efficiency and skills in neighboring communities. The company donated three tractors to local communities and built a tractor shed equipped with essential farming tools, including seeders, water pumps, hoes, and rakes. To boost yields, we provided maize and vegetable seeds, fertilizers, and technical guidance to 250 households. In addition, 190 households received high-quality goat and poultry breeds, fostering livestock development, diversifying farmers' income sources, and strengthening the local economy.

In 2024, CMOC Brasil continued to support the Family Nursery Program, repurchasing 30,000 seedlings for reforestation efforts while providing farmers with an additional source of income. Under this program, we will continue to provide nursery farmers with technical training, market expansion support, and cost-effective production techniques in order to achieve our goal of increasing annual production to 100,000 seedlings, as well as diversify species and help establish the nurseries as self-sustaining commercial operations. In 2024, CMOC Brasil also partnered with the Micro and Small Business Support

Service (SEBRAE) to launch a pilot program for local micro and small suppliers. As part of the initiative, 25 suppliers were selected through stakeholder engagement, supplier identification, capacity-building training, and business coaching. These suppliers will become official providers of goods and services to CMOC Brasil and will also be recommended to other local businesses, supporting job creation and regional economic growth.



CMOC Brasil's family nursery program continues to generate income for local farmers.



## Infrastructure

A strong infrastructure is essential for empowering local communities. Guided by local needs and priorities, we invest in critical services such as water and electricity supply, roads and bridges, healthcare, schools, and community facilities, each playing a key role in meeting basic needs. Beyond constructing new infrastructure, we also train local residents to manage and maintain existing facilities, ensuring long-term benefits for the community.

Under the framework of the current Cahier des Charges, TFM completed the construction of 41 water wells, including 16 wells equipped with manual pumps, which have been made available for community use. Additionally, in Mpala village, we drilled a 207-meter-deep borehole well for drinking water and installed a 200-cubic-meter water storage tower, connecting it to the Fungurume town water network to provide clean drinking water to approximately 70,000 residents. We also constructed a 4.3-kilometer asphalt road and three tractor sheds for the residents of Fungurume town. Ongoing TFM-funded infrastructure projects include the construction of seven primary schools, two village health centers, one village clinic, 38 kilometers of rural roads, 30 water wells, three community centers, one tractor shed, four grain storage facilities, and three farmers' markets.

In 2024, KFM launched a number of infrastructure projects under the Cahier des Charges to improve community living conditions. To address local water shortages, the company drilled a water well in six villages — Kisanfu Gare, Kisanfu Koni, Dikanda, Mibanze, Kalebi, and Mayeba. The wells are equipped with solar-powered pumps, 10,000-liter storage tanks, and power distribution systems, ensuring reliable access to clean water. To enhance educational facilities, KFM initiated the construction of a primary school in Mibanze village, which will include six classrooms and three offices for teachers, fully equipped with benches, blackboards, and textbooks. Additionally, KFM began constructing an 11-kilometer road to



connect isolated fishing villages with National Highway N39, improving transportation and enabling more efficient delivery of agricultural products to market.

In 2024, CMOC China completed the construction of a new bridge in Xiaohe village, an RMB 1.2 million investment aimed at improving local transportation. The bridge will provide a vital connection for local residents, ensuring safe and reliable access across the river during the flood season. Meanwhile, in Dongling Botanical Garden, Luanchuan county, CMOC China completed the "City Terrace" project, a dedicated space for cafés, yoga studios, and other small businesses that promises to enhance local leisure, wellness, and recreational facilities for the local community.



In 2024, CMOC China invested RMB 2 million (US\$280,000) to build the "CMOC Bridge" in Shizimiao Town, improving transportation and everyday convenience for local residents.

## Land Acquisition and Resettlement



All our global operations require the acquisition of land to accommodate mining, processing, and administrative needs. The acquisition of land follows procedures derived from site policies that in turn reflect relevant laws and regulations in the areas where operations are located. Across all our operations, land acquisition methods include stakeholder consultation and negotiated settlement based on fair market valuation.

At our China site, land acquisition was carried out in Shizimiao Town to support the development of a backup tailings storage facility at Hongshiyagou. In 2024, we acquired approximately 352 hectares of forested land and 14 hectares of land. Compensation was provided in accordance with the *CMOC China Land and Forest Management Regulations* and the compensation policies of Luoyang Municipal Government. During the resettlement period, we invested an additional RMB 4.6 million in local infrastructure improvements, including road repairs and bridge construction, to benefit neighboring villages and towns. We also provided job opportunities for affected

residents in accordance with the *CMOC China Regulations on the Employment of Resettled People*. In 2024, we employed a total of 65 resettled people, including 28 women. To date, we have created jobs for more than 1,000 resettled local residents, providing them with a stable source of income.

At our TFM operation in the DRC, land acquisition and resettlement follow international standards and good practices, notably Performance Standard 5 of the International Finance Corporation (IFC), which is designed to protect the livelihoods and rights of people vulnerable to poverty and lacking formal land tenure. In 2024, TFM acquired 1,340 hectares of land for operational needs. In total, 3,657 affected persons were resettled in other communities with assistance from TFM. In addition, 908 affected persons received economic compensation for their land and other resources, but were not required to relocate. Since the beginning of construction in 2006, TFM has physically displaced 3,068 households, of which 742 have been relocated to newly built residential areas. An

additional 2,326 have been assisted with resettlement in Fungurume, Tenke, and other communities. Under our livelihood restoration program, we relocated 1,578 plots of farming land within the mining concession and distributed seeds and fertilizer to support the cultivation of crops. During the 2024 agricultural year, we helped to restore the livelihoods of 3,780 displaced farmers. TFM recognizes the importance of land management and resettlement, and formulates acquisition and resettlement plans in close consultation with stakeholders. Our resettlement activities also undergo an external audit every two years to determine whether resettlement outcomes comply with relevant policies and standards, assess satisfaction among members of the community, identify gaps, and develop corrective action plans accordingly. In 2024, we continued implementing corrective actions based on the recommendations of the 2022 audit, ensuring that resettlement does not lower the standard of living for affected households. In addition, TFM actively engages with communities to safeguard cultural heritage sites. In accordance with our *Chance Find Procedure*, we closed the Kanzi grave within the mining concession and, in agreement with local chieftains, opened the newly designated Mofya grave.

In 2024, no land acquisition or resettlement activities took place at the KFM site in the DRC, nor were there any relocations of cultural heritage sites. The company continued to monitor the livelihoods of previously resettled residents and included them in the *Cahier des Charges* to further support their economic development.

At CMOC Brasil, approximately 140 hectares of land was acquired in 2024, affecting two households. Affected residents were compensated in accordance with relevant legal requirements and company policies, following thorough consultation. Land acquisition at our Brazil site is conducted in accordance with our *Land Acquisition Process*, ensuring that stakeholder concerns are effectively addressed.



Residents of Kiloville Village in the TFM community moved into new resettlement housing.

## Human Rights

In 2024, CMOC continued to enhance its human rights management and practices across business units, carried out ongoing human rights due diligence (HRDD), and strengthened stakeholder engagement to better meet their expectations. At the same time, we continued to implement the *Human Rights Policy*, *Responsible Production and Sourcing Policy*, and *Supplier Code of Conduct*, reinforcing ethical business conduct and human rights protections in our operations and supply chain. These efforts included conducting continuous due diligence in the mineral supply chain and ensuring that responsible mineral production and sourcing complied with the OECD Guidance.

In 2024, employee training remained a key priority at CMOC Brasil. A total of 1,432 new employees received human rights training as part of their induction, while all other employees completed refresher training. The site also hired 26 security contractors who are primarily responsible for controlling access points. All of these staff are unarmed and have received training in human rights. In addition, all service agreements at our Brazilian operations include provisions on human rights. The company investigates and addresses all human rights related complaints that are reported to the "Alô CMOC" hotline.

Between March and September 2024, KFM invited international human rights experts to conduct HRDD. In the course of the HRDD, experts assessed and prioritized human rights risks, impacts, and salient issues within KFM based on the United Nations Guiding Principles on Business and Human Rights (UNGPs). They engaged extensively with more than 235 key stakeholders during their visit to the KFM site. According to the HRDD, KFM's salient human rights issues include occupational health and safety, environmental impacts related to human rights, labor rights for contractors and suppliers, influx of migrants, and security-related human rights issues. Community representatives widely acknowledged KFM's positive

engagement with local communities and expressed appreciation for KFM's social investments, training programs, and community involvement in the development of the *Cahier des Charges*. At the same time, stakeholders highlighted concerns regarding working conditions for KFM employees, particularly contractors, and the potential impacts of operations on community water sources and crops. These issues have been prioritized for ongoing management.

As a follow-up to the HRDD, KFM appointed a senior executive to oversee the implementation of a human rights management system and established a cross-departmental human rights working group to ensure the continuous execution of HRDD. At the same time, KFM formulated a Human Rights Action Plan to manage human rights risks for both employees and the community. The plan encompasses various aspects of TFM's operations, including human resources, contracts and procurement, HSE, local communities, resettlement, and security. KFM also conducted HRDD training for senior management and published a Human Rights Due Diligence Report.



In May 2024, KFM conducted a human rights due diligence assessment.

In response to stakeholder concerns about employee and contractor working conditions identified in the HRDD, in 2024 KFM strengthened its contract management processes, enhanced communication and oversight mechanisms for contractors and suppliers, and developed and implemented the *Contractor ESG Risk Management Implementation Guidelines*. The company also regularly assesses contractor labor management practices and provided training to 23 contractor management personnel. In addition, KFM integrated human rights policy training into both induction and refresher training programs, delivering sessions to 297 new employees and 4,308 existing employees.

In 2024, our TFM operation continued to conduct HRDD to enhance the management of human rights risks. This primarily included updating and implementing the risk controls outlined in the Human Rights Action Plan, which is based on an integrated approach that incorporates TFM's management plans and systems for human resources, HSE, contracts and procurement, and global supply chain to manage workers' rights risks, and for community, resettlement, and security to manage community-related human rights risks. TFM's Chief Partnership Officer is responsible for the management and implementation of the Human Rights Action Plan.

In addition to risk controls, TFM also engages regularly with key stakeholders to monitor and prioritize human rights risks, impacts, and salient issues, based on the UNGPs. This includes liaising with TFM management, workers, union representatives, community members, vulnerable groups, traditional leaders, and local authorities in order to understand their views and concerns in relation to salient human rights issues and corresponding mitigation measures. In view of the management challenges

arising from the construction and commissioning of the mixed mine project, this year's HRDD procedures also included a comprehensive assessment of contractors' ESG practices through approximately 50 site inspections and focus group interviews led by the human resources department and the ESG Working Group. The assessment covered contractors across the entire mining site, including the recently expanded East Plant of the mixed mine. Our HRDD activities were also informed by the expert opinions of the Copper Mark and ISO re-certification auditors. During the Copper Mark audit, around 500 internal and external stakeholders were interviewed by independent external assessors .

According to our HRDD, TFM's salient human rights issues include artisanal and small-scale mining (ASM), influx of migrants, security and human rights, workers' rights for contractors and suppliers, and workplace health and safety. In terms of ASM, in the copper mining region of southeastern DRC, significant artisanal mining takes place. Many ASM workers, mostly in-migrating people, congregate around privately owned mines, and some even enter mining sites to engage in illegal ASM activities. This is compounded by the slow progress of ASM formalization in the DRC, with the result that illegal ASM operations around the TFM concession pose significant human rights risks. To continue to manage the human rights risks associated with illegal artisanal mining, TFM has developed a comprehensive ASM risk management strategy in collaboration with the Better Mining Initiative. The strategy is informed by a baseline study and comprises an ASM risk management policy with targeted mitigation measures.

In March 2024, TFM launched a child labor prevention and remediation program to address the issue of child labor in illegal artisanal mining. Implemented in partnership with the Centre for Child Rights and Business, an international NGO with extensive expertise in addressing child labor, the program aims

to prevent child labor in illegal ASM communities within the TFM concession and provide remediation for the most vulnerable children. At the end of 2024, TFM completed a baseline survey to investigate the risks of child labor and inform prevention strategies. To date, the program has identified 17 vulnerable children, who have been included in a remediation plan.

CMOC also continues to support multi-stakeholder initiatives such as the Fair Cobalt Alliance and Better Mining to address the widespread and complex human rights challenges associated with ASM. We continue to engage in dialog with the government and appeal for the establishment of more legal ASM mining areas. We have also strengthened communication with various stakeholders in the community to build consensus regarding the risks associated with illegal mining. In addition, we support basic and vocational education in the community to reduce the risk of child labor in artisanal mining, and we invest in local communities to promote local economic diversification, so as to encourage illegal artisanal miners to transition to legal economic activities.

In terms of risks associated with influx of migrants, the main risks include a rise in crime, disease, harassment, and gender-based violence; adverse impacts on water, sanitation facilities, land, and cultural heritage sites; loss or impairment of social investments; and the detrimental impact of increasing ASM mining. Through ongoing communication with various stakeholders, TFM maintains dialog and collaboration with local government, communities, traditional tribal leaders, and non-governmental organizations. TFM also continues its efforts in areas such as education, clean water, community health and safety, local employment, and human rights protection through strategic community investments and comprehensive development projects. These initiatives aim to alleviate the adverse impacts of migration.

To ensure protection of workers' rights, CMOC's *Human Rights Policy* and TFM's *Human Rights Commitment Statement* and *Zero Tolerance Rules* are applicable to both TFM employees and contractors. All TFM employees and contractors are required to complete induction training and annual refresher training, which includes a module on the company's human rights policies. In 2024, TFM strengthened human rights training for employees and contractors, and took steps to raise awareness of grievance mechanisms. Human rights grievance and investigation procedures are applicable to all TFM employees, contractors, and local community members. In 2024, 95% of TFM employees and 98% of contractors received training in human rights policies.

In recent years, the expansion of TFM's operations has resulted in a significant increase in the number of construction contractors. TFM is fully aware of the challenges and increased occupational health, safety, and human rights risks associated with contractors, and is implementing measures in the following areas to further mitigate these risks:

- Relevant functional departments have intensified inspection and oversight of all contractors. In 2024, we conducted over 50 compliance checks for key contractors, identifying a number of deficiencies in areas such as employment conditions, employee communication channels, and safety management procedures. Based on the findings, we took corrective actions and suspended the bidding qualification of a high-risk contractor.
- We have refined our ESG risk management procedures and assessment tools for contractors and suppliers to ensure that ESG requirements are implemented across the entire project lifecycle from the tendering stage through to contract execution. These new risk management procedures and assessment tools were fully implemented at the end of 2024.

- We have implemented a tiered management approach for contractors, drawing insights from routine inspections and considering different levels of risk exposure. Measures include increased training and engagement, written warnings, remedial action, temporary suspension, removal of bidding qualification, and contract termination.
- To reinforce awareness of CMOC and TFM ESG requirements, in addition to induction and refresher training, we provided two rounds of intensive training on human rights and ESG compliance for all contractor management staff, involving more than 150 contractor managers and supervisors. These efforts have delivered a significant improvement in contractors' performance across various metrics, including employment conditions, employee communication, and grievance mechanisms.
- TFM continued to raise awareness of grievance mechanisms by distributing educational leaflets to contractors and providing induction and refresher training. In addition, new grievance mailboxes were installed at operational sites and accommodation facilities. In 2024, TFM received a total of 81 grievances, 28% of which were submitted by contractors. As of the end of 2024, 74% of grievances have been resolved.

TFM's policies for managing security and human rights risks are outlined in the following section. For information on the management of health and safety risks, see "Safety and Occupational Health" in the "Employees" section of this report.

## Security and Human Rights

Security solutions for all of our operations are tailored to specific needs. These include measures to prevent unauthorized personnel from disrupting production, ensure orderly and secure operations, safeguard the health and safety of employees and the public, and protect company assets.

In the copper mining region of southeastern DRC, an influx of migrants has intensified illegal ASM activities, contributing to rising crime in local communities. To safeguard company assets and personnel and maintain access control to operational areas, all of our operations in the DRC employ security

personnel and engage private security contractors. These personnel and contractors are unarmed, have no law enforcement authority, and are primarily responsible for monitoring and managing access control points and industrial production areas within the mining area.

TFM and KFM adhere to the Voluntary Principles on Security and Human Rights (VPSHR), a set of principles that help companies to achieve operational security while upholding human rights. Both mines have incorporated VPSHR and human rights requirements into contracts for private security contractors, and provide training to their employed security personnel, private security contractors, and public security forces on the key principles of the VPSHR. Private security firms are also subject to due diligence at the contracting stage, including human rights aspects.

In the TFM and KFM concessions, the Mines and Hydrocarbons Police (PMH), a branch of the national police, oversee the enforcement of national laws, the legal extraction of minerals, and the safe operation of mining activities. While the PMH operate independently in law enforcement, they must adhere to the terms outlined in their contracts with the company's security contractors. These contracts explicitly stipulate compliance with the VPSHR, including directives on how to address allegations of human rights violations.

In recent years, a surge in migrants has exacerbated illegal mining activities in and around TFM, causing an uptick in crime and safety issues in local communities that relate to dangerous ASM practices. In June 2019, the government of the DRC decided to deploy armed forces to disperse illegal miners and crack down on unlawful activities. The armed forces and police of the DRC have the authority, as per applicable laws, to unilaterally enter and perform their duties in mining concessions. As of December 2024, there were still 141 soldiers stationed at

the TFM concession and in adjacent areas. TFM recognizes the potential human rights risks associated with the deployment of the military. Therefore, with each rotation of the military, the company issues letters to government and military leaders that reaffirm its commitment to human rights policies, including its adherence to the VPSHR and policies regarding the use of force. TFM does not engage directly with the armed forces, does not participate in any military operations, and does not provide any assistance that could facilitate military operations.

The primary security and human rights risks faced by TFM come from ASM activities within and around the mining area. To manage these risks, TFM conducts regular risk assessments and has formulated a VPSHR action plan, which is updated on a regular basis. In particular, we:

- Intensified safety training for frontline mining staff during the handover period;
- Updated security-related standard operating procedures (SOPs);
- Ensured security communication devices are operational;
- Distributed VPSHR reminder cards;
- Organized monthly meetings between the community department, external relations department, mining department, legal department, and senior management in order to enhance cross-departmental collaboration and address cross-functional issues; and
- Implemented a community program to prevent and remediate child labor risks in ASM activities.



In December 2024, TFM partnered with the United Nations Joint Human Rights Office (UNJHRO) to provide VPSHR training to public security forces, including the armed forces (FARDC) and mining police (PMH).

We continue to provide training for public and private security forces. In 2024, 97% of TFM's 158 direct-hire security employees and 2,474 private security contractors received VPSHR training. As of the reporting date, a total of 200 PMH officers are stationed in the TFM concession; at the end of 2023, 197 of these officers participated in VPSHR training organized by the NGO Justicia. TFM also invited international human rights experts from Triple R Alliance to provide a training of trainers (ToT) course on VPSHR for security management personnel and PMH officers. In addition, we worked with the *UN Joint Human Rights Office* (UNJHRO) to raise awareness of VPSHR requirements among leaders of public security forces, including the DRC armed forces (FARDC) and mining police (PMH).

As part of its efforts to promote and implement the VPSHR, TFM views the VPSHR as a strategic entry point for further dialog with the government of the DRC and the training of

public security forces. TFM regularly participates in VPSHR Working Group meetings held in Kolwezi and Lubumbashi. In 2024, we participated in more than 20 such meetings, and were also invited to attend two VPSHR conferences in Kinshasa organized by Justicia, where we exchanged insights with stakeholders, communicated our commitment to the VPSHR, liaised with the government to highlight the challenges of illegal ASM activities and propose potential solutions, and assisted with the development of VPSHR training materials.

At our KFM operation, the mining concession covers a relatively small area of land and is completely enclosed by fencing, which deters intrusion by artisanal and small-scale miners. As a result, security and human rights risks are relatively small compared with other mining companies in the region. Nevertheless, security and human rights still constitute a key component of KFM's human rights due diligence. In 2024, KFM's HRDD included a separate VPSHR module with

VPSHR-related risk assessments and training programs aimed at strengthening engagement with security-related stakeholders, including PMH representatives, private security managers, and security personnel. As part of its HRDD, KFM also engaged human rights experts to deliver a series of workshops and training sessions for KFM security staff, private security contractors, and PMH officers, as well as a training of trainers (ToT) course for private security managers. In 2024, 100% of KFM security personnel and PMH officers received VPSHR training. In addition, KFM continued to share best practices by participating in regional VPSHR Working Group meetings in Kolwezi and Lubumbashi.



## Product

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Our mining and processing operations produce refined metals as well as intermediate and final composite products, which are essential to the global economy. Molybdenum, tungsten, and niobium are primarily used in the metallurgy of super alloys. Cobalt, a key component of lithium-ion batteries, is an important material for batteries and electric vehicles. Copper is widely used in daily life and plays a critical role in the clean energy transition, where it supports the development of solar panels, wind turbines, energy storage, electric vehicles, and related infrastructure. Phosphate fertilizer is indispensable for agriculture. In addition, our manufacturing operations rely on various products and services sourced from suppliers and contractors.

Our trading company IXM provides global sourcing, risk management, logistics, and financing solutions to a well-established network of clients in the metals industry. IXM is also committed to enhancing the sustainability and transparency of the green mineral supply chain, which is essential to the energy transition.

The sourcing, production, transport, and use of metal raw materials can pose environmental and social risks to ecosystems and people. To mitigate these risks across our operations and throughout the value chain, we implement policies and conduct due diligence at all our business units.



## Supply Chain Management

Our operations require extensive procurement of facilities, equipment, production materials, and engineering services. This makes the environmental and social risks associated with suppliers and contractors a critical consideration. To mitigate these risks, we are committed to building a comprehensive supplier and contractor management system that reduces potential risks, ensures supply chain sustainability, and strengthens responsible sourcing practices.

CMOC's 13 compliance and sustainability policies establish the key principles and performance expectations for all operating units. Key policies governing responsible supply chain management include the *Responsible Production and Sourcing Policy*, *Code of Business Conduct*, *Supplier Code of Conduct*, *Human Rights Policy*, *Anti-Corruption Policy*, *Anti-Money Laundering Policy*, and *Economic Sanctions Policy*. In 2024, CMOC and its subsidiaries continued to implement these policies while also enhancing processes and frameworks for managing suppliers, contractors, and other business partners, based on their respective risk profiles.

In addition, CMOC and its subsidiaries have implemented a grievance mechanism that enables all stakeholders, including suppliers and contractors, to raise concerns regarding company operations and supply chain management without fear of retaliation.

## Supply Chain Management in Mining Business

For our mining business, we have implemented a robust procurement management system with a series of policies and procedures at the Group level, including the *Engineering Services Tender Management System*, *Material Supply Management System*, *Supplier Management System*, and *Supplier Management Procedures*. These policies regulate the onboarding, evaluation, capacity building, and offboarding of suppliers. They also set clear standards for ESG performance, covering areas such as business ethics and anti-corruption, HSE, and human rights protection.

At both the Group level and at our mining subsidiaries, we use third-party business data platforms (such as Tianyancha in China and NAVEX globally) to conduct due diligence on potential suppliers. This process covers areas such as sanctions, human rights, environmental protection, and anti-corruption. We also carry out site visits and review documents to assess suppliers' capabilities, business risks, and

ESG management practices. New suppliers are required to comply with CMOC's compliance and ESG policies, incorporate relevant ESG clauses into their contracts, and sign appendices such as the *Anti-Corruption Agreement* and the *Sustainability Commitment*. Additionally, each mining site regularly evaluates supplier performance, with environmental and social criteria as key metrics.

We continue to implement a supplier blacklist management system to blacklist any suppliers or contractors who violate the Group's integrity policies or are rated as critical-risk in ESG assessments. Blacklisted suppliers and contractors are removed from the approved supplier list to prevent them from engaging in further business with the Group or its subsidiaries.

In January 2025, CMOC hosted its first Global Supply Chain Supplier Conference, aimed at strengthening supplier collaboration, enhancing supply chain management, promoting responsible sourcing, and establishing long-term strategic partnerships.



At the Global Supply Chain Supplier Conference, the Group's Chairman emphasized the importance of collaborating to build a transparent and ethical supply chain. The Group's ESG Vice President also outlined CMOC's ESG policies and expectations, helping suppliers deepen their understanding of ESG and fostering the development of a responsible supply chain.

At the TFM and KFM mining sites in the DRC, contractor management poses a significant risk due to poor governance in the local supply chain and weak regulation framework. In response, TFM and KFM made strengthening contractor management a key priority in 2024 by introducing the *Contractor ESG Compliance Management Procedures*. To support these procedures, TFM and KFM also developed a series of management tools and strengthened the following measures: (1) Incorporating ESG requirements into tender documents; (2) Incorporating ESG clauses into contract terms; (3) Conducting regular training on topics such as safety, human rights, labor management, security and human rights, HSE, anti-corruption, community relations, and grievance mechanisms; (4) Standardizing semi-annual cross-departmental inspections and comprehensive ESG risk assessments of contractors, with appropriate disciplinary measures for non-compliance, including mandatory corrective actions, fines, work stoppages, reductions in ESG performance scores, disqualification from the tendering process, and contract terminations.

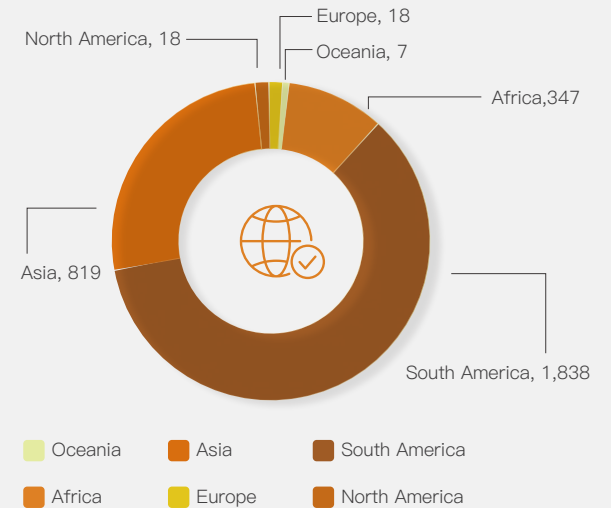
Our Brazil operations implement a monthly supplier performance assessment program that evaluates key contract suppliers and provides feedback. The program includes specific key environmental and social performance indicators in areas such as suppliers' environmental management and waste handling capabilities, community engagement, support for volunteerism, and professional qualifications. In addition, the program aims to publicly recognize suppliers with outstanding HSE and social responsibility performance, so as to encourage them to further strengthen their commitment to these areas. For supplier compliance management, our Brazil operations use the Brazilian Federal Government's Sanctioned Companies List (CNEP) and Ineligible and Suspended Companies List (CEIS) during the pre-screening process to identify potential suppliers with compliance issues, such as corruption or human rights

violations. With companies that have been successfully engaged, we conduct monthly compliance checks throughout the contract period. If any discrepancies are found, we take actions such as suspending cooperation, delaying payments, or enforcing penalties in accordance with the contract.

At our Chinese mining operations, we follow procedures such as the *Procurement Management Procedures, Supplier Management Procedures, and Tender Management Procedures* to ensure that eligible suppliers meet regulatory requirements in areas like business integrity, technical expertise, and HSE. The company conducts regular reviews and an annual evaluation of suppliers, with a particular focus on due diligence for those handling hazardous chemicals or posing significant environmental risks.

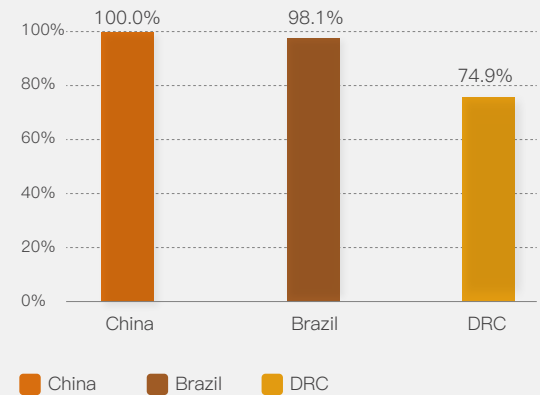
CMOC encourages the use of local suppliers across its global operations to promote local employment and economic development. The tables below present the geographic distribution of suppliers in the mining sector, along with the proportion of local suppliers in procurement (we define suppliers from the country where the business operates as local suppliers). Due to the relatively low level of economic development in the DRC, the number of eligible local suppliers is limited, resulting in a lower proportion of local procurement compared to other regions. Going forward, CMOC will continue to support local economic development through various channels, including tax contributions, community investment, and local tenders, with a particular focus on supporting the growth of SMEs in the community.

Total number of suppliers by geographical region<sup>(1)</sup>



<sup>(1)</sup>IXM not included

Proportion of local suppliers in the mining sector



## Responsible Sourcing of Minerals

As a mining company, we are acutely aware of the risks of adverse impacts associated with extracting, handling, and sourcing minerals from conflict-affected and high-risk areas, which constitute material risks for our operations. To mitigate these risks, we are committed to upholding international standards of diligence and conduct, and in particular, to conduct due diligence on mineral suppliers in accordance with the OECD Guidance. Our *Responsible Production and Sourcing Policy* stipulates policies, procedures and tools for identifying, assessing, mitigating, monitoring, and reporting human rights, conflict-related, and financial crime risks in the minerals supply chain, including those in conflict-affected and high-risk areas (CAHRA).

In 2024, neither our TFM nor KFM operations in the DRC sourced minerals from third parties or upstream mineral suppliers. In China and Brazil, we conducted due diligence on concentrates sourced from third parties. Our Chinese operation sourced a small amount of molybdenum concentrate from a third party, all of which originated from Chinese mines that are not located in a CAHRA; at CMOC Brasil, we sourced a small amount of phosphorus concentrate from a third party, all of which originated from Brazilian mines that are not located in a CAHRA. In the Democratic Republic of Congo, where our TFM and KFM operations are located and which is classified as a high-risk area by our CAHRA index tool, we have established a responsible production management system in accordance with the OECD Guidance in order to identify, manage, and report on Annex II risks in our operations. The management of corruption-related risks are outlined under “Business Ethics and Transparency” in the Product section of this report. For the management of human rights risks, see “Human Rights” in the Communities section of this report.

In 2024, TFM, KFM, and our Chinese tungsten operation each published a Supply Chain Due Diligence Report and completed an RMAP audit under the RMI. Currently, all of these operations are listed as RMAP-conformant smelters.

## Supply Chain Management in Trading Business

As a global company involved in the trading of metals commodities around the world, IXM recognizes the risks associated with its minerals and metals supply chains and incorporates ESG factors into its business decisions to reduce risk and meet expectations of its stakeholders.

IXM commits to ethical and responsible business conduct in its supply chain and has established a responsible sourcing management system in line with international good practice described in the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals for Conflict-Affected and High-Risk Areas (“OECD Guidance”) and the Joint Due Diligence Standard for Copper, Lead, Nickel, and Zinc (“JDD”) which is derived from the OECD Guidance.

IXM’s Responsible Sourcing Policy (publicly available on IXM website [www.ixmetals.com](http://www.ixmetals.com)) defines the key principles and the risk management approach that IXM applies globally. This policy is consistent with the standards set forth in the OECD Guidance and the JDD.

To implement this policy, IXM has established robust management procedures to identify, assess, mitigate, and report on risks in its minerals and metals supply chains, following the 5-step framework for risk-based due diligence of the OECD Guidance. These procedures allow for identification and assessment of ESG-related risks, including risks listed in the Annex II of the OECD Guidance. It consists of a systematic risk-based due diligence of IXM’s suppliers and is regularly supported by desktop research, supplier engagement, consultation with other stakeholders, and — depending on materiality of potential red flag — on-site visits or independent third-party audit.

IXM has made publicly available a grievance mechanism that ensures anonymous reporting of any policy violations or adverse impacts on stakeholders.

In 2024, IXM further improved its responsible sourcing management system in accordance with the continual improvement process. Three important activities that took place were the development of a customized tool for assessing Conflict-Affected and High-Risk areas (CAHRA), roll-out and completion of the Responsible Sourcing e-learning for all IXM employees and the launch of IXM’s Supplier Capacity Building Program. The Supplier Capacity Building program is still in its infancy, but we aim to explore how it can be further expanded in the coming years with the ultimate objective to improve the livelihood of workers and communities in the metal supply chains IXM are active in.

### IXM Due Diligence Approach

IXM Counterparty Due Diligence (CDD) process is applicable to all commercial counterparties (suppliers/customers) globally and follows a risk-based approach where IXM is examining for red flags such as those listed in the OECD Guidance. When a red flag is identified, IXM performs enhanced due diligence to confirm or neglect associated risks and where appropriate, develop risk management plans to mitigate identified risks.

### IXM Sustainability Initiatives

IXM has several financing facilities in place linked to ESG KPIs, one of these being the Revolving Credit Facility. In 2024, IXM developed sustainability-linked key performance indicators with ambitious targets, aligned with the Loan Market Association (LMA) Sustainability Linked Loan Principles (SLLP). The ambitiousness of the targets has been concluded by benchmarking with peers and looking at historical performance. These indicators are subject to independent review, ensuring transparency and accountability. These targets include key performance indicators monitoring IXM’s portfolio impact on greenhouse gas emissions, supplier capacity building and community development.



## Product Stewardship



In 2024, IXM maintained its EcoVadis gold rating and approved the score with 5 points. IXM was ranked in the top 3% of companies rated by EcoVadis in the metal trading industry. EcoVadis is one of the largest business sustainability rating provider, which measures CSR performance in four key areas: Environment, Labor & Human Rights, Ethics, and Sustainable Procurement.

IXM recognizes that ASM provides a source of income and generates employment in many countries. IXM supports legitimate ASM formalization efforts but maintains a policy that does not allow for ASM sourcing from CAHRA. IXM and CMOC are members of the Fair Cobalt Alliance (FCA) and Better Mining. FCA and Better Mining aim to assist in the professionalization of the ASM copper-cobalt sector in the DRC to eventually facilitate the sale of ASM material to mainstream clients, and to help improve the lives in DRC mining communities.



Across our global operations, our product stewardship systems address the quality, compliance, and sustainability risks associated with our products and processes, including occupational health and safety, environmental management, quality control/quality assurance, traceability, and labeling in accordance with the Globally Harmonized System of Classification and Labeling of Chemicals. These systems ultimately protect the interests of our clients and may enhance access to preferred markets for CMOC products.



At our TFM and KFM site in the DRC, all copper and cobalt is labeled with a barcode and/or QR code to enable traceability from the mine to the process plant.

Our operation in the DRC also has a set of special responsibilities related to product stewardship associated with the sustainability of its supply of cobalt hydroxide to global markets. The DRC hosts a large number of unregulated artisanal miners as well as customers for their product,

a situation that has led to high-profile international concerns around the risks of child labor, workplace health and safety, and human rights in the cobalt supply chain from that country. Our TFM operation manages this risk through a set of product control and custody procedures to ensure that it mines, processes, and sells only those minerals that originate from its mining concessions and that are mined by its own operations. These procedures are in turn guided by the requirements of responsible and sustainable management as described in this report. TFM does not purchase or process ore from any other source. Our procedures include specific actions to dispose of illegally mined ore confiscated by government authorities within the TFM concession. After being confiscated by mining police, the company stores, reports, and periodically buries illegally mined ore in waste rock piles. These burial sites are unmarked and cannot be identified by any other means, ensuring that the ore cannot be recovered for another purpose. TFM has a complete system to track the copper and cobalt products produced at its operations through the points of transfer and to the ultimate point of delivery to its customers. Due to the importance of monitoring and maintaining these procedures while managing TFM's mineral supply chain, TFM regularly undertakes independent assurance of the company's product control and custody procedures (see "Assurance Statement").

Due to the small size and complete enclosure of the KFM mining site, there is currently no risk of artisanal mining. In addition, the minerals mined, processed, and sold by KFM are sourced exclusively from industrial mining processes within KFM's own mine. CMOC operates a zero-tolerance policy on child or forced labor, employing only people who have reached the legal working age. In 2024, we found no violation of any laws or regulations pertaining to child or forced labor.



## Business Ethics and Transparency



We strongly believe that higher transparency along the value chain will increase the sustainability of the cobalt supply, which is essential for the battery industry. In order to achieve this goal, in 2019 CMOC and its trading company IXM joined Glencore and ERG in the ReSource consortium, which provide a platform to trace the origins of battery materials and ensure responsible procurement. The ReSource consortium has received support from other companies and industry associations in the materials sector including the Global Battery Alliance, as well as the RMI and the Cobalt Institute. In 2024, ReSource has successfully provided end-to-end traceability for 100% of cobalt hydroxide produced TFM and KFM mines. Its chain of custody solution seamlessly follows the cobalt hydroxide as it moves through the supply chain—from CMOC’s sites onto its trading arm, IXM. By leveraging a secure and tamper-proof digital infrastructure, the platform ensures that CMOC’s downstream clients have access to transparent and verifiable sourcing information, reinforcing their commitment to responsible sourcing and compliance with international sustainability standards.

At all our operations, quality and safety issues related to our products satisfy various local regulations, as well as the ISO 9001 Quality Management System scheme. At IXM, the company is committed to quality assurance; all sales contracts specify the elemental composition used to determine a blend plan, and the company must guarantee to provide customers with mixed concentrate that is consistent with that plan.

In 2024, CMOC did not receive reports of any product-related breaches pertaining to health and safety, environment, labeling, or social issues.

CMOC is committed to ethical business practices in its operations and supply chain. We affirm our commitment to act with integrity at all times and to respect the laws and regulations of wherever we do business. In 2024, CMOC continued to implement its *Code of Business Conduct*, *Anti-Corruption Policy*, *Anti-Money Laundering Policy*, and other policies and relevant laws, which apply to the entire group. As stated in our *Code of Business Conduct*, “Corruption and bribery will not be tolerated and will result in disciplinary action, including termination, as well as possible civil and criminal consequences for the offending individual(s)”. CMOC requires employees and contractors to abide by international and local laws and regulations in the field of business ethics. This includes laws such as the United States Foreign Corrupt Practices Act, the United Kingdom Bribery Act, and the Criminal Law, Anti-Unfair Competition Law, and Anti-Money Laundering Law of the People’s Republic of China. The company strictly prohibits bribery of government officials and other individuals, and all employees who may be exposed to potential corruption risks are required to undergo training. Employees, contractors, and other stakeholders across our operations have access to CMOC’s whistleblower channel and site-level grievance systems to report any suspected cases of bribery or corruption.

The Group Anti-Corruption department is responsible for investigating and addressing cases of bribery, abuse of power, dereliction of duty, and other misconduct, as well as formulating anti-corruption policies and fostering a culture of integrity. In 2024, we continued to implement a series of anti-corruption and business ethics policies, including regulations for critical positions, requiring employees to sign a personal commitment to integrity, and a supplier integrity agreement. Through these actions, we have reinforced the importance of professional conduct among employees and contractors, including clear anti-corruption policies and

measures to protect the company’s trade secrets, require the reporting of conflicts of interest, and prevent improper business dealings. In 2024, we continued to adopt a range of measures to promote ethical business practices, including:

- Strengthening oversight of individual operations: At our TFM, KFM, Brazilian, and Chinese operations, we established a separate department that is responsible for protecting the company’s assets, monitoring business integrity, and investigating and addressing cases of misconduct.
- Promoting our whistleblowing system: At all our operations, we continued to promote our whistleblowing system, which is underpinned by a clear commitment to protect the identity of whistleblowers and witnesses, as well as any data or supporting evidence which they may provide. Reports of misconduct are processed, registered, managed, and investigated in strict confidence, and the company prohibits any form of retaliation against whistleblowers and witnesses.
- Providing anti-corruption training: Over the course of 2024, we organized a total of 12 training sessions for all levels of management and staff in key positions such as procurement, engineering, and finance. Through systematic training, we fostered a culture of integrity and self-discipline, ensuring that all members of our workforce understand and comply with our code of conduct.
- Recruiting a team of volunteers: At each of our operations, we recruited a team of frontline volunteers to help foster a culture of integrity and report potential misconduct.
- Reforming our staff incentive and disciplinary policies in order to establish a clear link between performance and professional ethics and stipulate sanctions for conduct which violates the company’s integrity policy, such as disciplinary warnings, withholding performance-related bonuses, demotion, reducing pay, and dismissal.

In 2024, we continued to conduct unscheduled visits and spot checks to assess the risk of fraud and misconduct throughout the company and our core business units. For confirmed cases of fraud or misconduct, we take appropriate disciplinary action and refer any suspected criminal activity to the relevant judicial authorities. Our investigations also focus on identifying, addressing, and preventing risks to our operations by imposing disciplinary measures on the responsible individuals, recovering economic losses, and rectifying deficiencies. During the reporting period, the Group Anti-Corruption department investigated 11 cases of misconduct involving 11 employees. Two cases were referred to Chinese judicial authorities, which led to criminal proceeding against the two individuals concerned. The other nine cases were addressed internally, resulting in the dismissal of five employees and disciplinary warnings for four employees.

To manage compliance, the Group Legal & Compliance department has implemented a comprehensive compliance management system, which is updated regularly to enhance performance. In 2024, we updated our supplier and partner due diligence system to improve the efficiency and accuracy of the screening process. We also conducted targeted monitoring of country-specific compliance risks across our various business units and global business partners, focusing on areas such as sanctions and anti-money laundering measures, and created a systematic database of compliance documents including national and international sanctions lists, relevant laws and regulations, and internal policies.

Training is also an essential component of our compliance management system. In 2024, we continued to provide compliance training for senior executives and new employees at our Group headquarters. At our DRC and Brazilian operations, we continued to provide online compliance training and expanded the training framework to include our Chinese operations. Training encompasses a range of core modules including “Ethics and Code of Conduct” and “Global

Anti-Bribery and Corruption”, as well as country-specific modules tailored to local compliance risks, such as “Diversity, Equity, and Inclusion” and “Workplace Harassment”. During the reporting period, a total of 3,187 employees participated in online training across our global operations, including 371 employees at our TFM operation, 650 employees at our KFM operation, 1,127 employees at CMOC Brasil, 891 employees at our Chinese operations, and 148 employees at the Group headquarters. In addition, in 2024 the Legal & Compliance department launched a new Group-wide “Compliance Month” campaign to raise awareness of compliance requirements. The campaign comprised a series of online and offline lectures, training sessions, and interdepartmental meetings on topics such as cybersecurity and data compliance, export regulations, and laws governing mineral resources and energy.

At our Chinese operations, we have established a separate department that is responsible for monitoring integrity, investigating potential cases of misconduct, and recommending remedial measures in accordance with Group-level anti-corruption policies. In 2024, we continued to implement our *Corruption and Fraud Prevention Policy* to enhance surveillance of key decision-making processes, critical projects, key appointments, and major spending, as well as mitigate associated risks. We also organized around a dozen training sessions for all CMOC China employees to raise awareness of the company’s compliance policies and foster a culture of integrity.

At TFM, policies such as our *Bribery and Extortion Policy*, *Charitable Donations Policy*, *Regulations on Business Travel Support for Government Officials*, and the *Regulations on Administrative Fees* clearly define rules for the acceptance of gifts, dining and entertainment, charitable donations, and direct support for government officials. The Legal & Compliance Department regularly conducts compliance audits of the company’s administrative expenses, issues reports and advice, and informs the CEO of the company. TFM continues to be a

member of the Extractive Industry Transparency Initiative (EITI) at the national level, and submits information on payments to the national treasury and other government agencies each year in accordance with EITI-DRC requirements. TFM also continues to disclose taxation payments and information on the company’s operations on a quarterly basis. A TFM representative is a member of the EITI-DRC National Committee, which represents industry concerns and participates in EITI reporting projects and disclosure work.

Our KFM site continued to enforce seven compliance policies and procedures including the *Policy on the Acceptance of Gifts, Dining and Entertainment*, and the *Charitable Donations Policy and Procedure*, as well as a series of supplementary regulations such as the *Grievances Reporting Regulations*, *Supplier Code of Conduct*, and the *Legal, Regulatory and Compliance Framework*. We also provided training for all members of the KFM workforce, including contractors, to raise awareness of our compliance policies and regulations. In 2024, the Compliance Management department launched a phased internal audit to evaluate compliance across the supply chain as well as within our Operations Management, Human Resources, and Finance departments. KFM is a member of the EITI-DRC and regularly discloses payments to government entities.

IXM is committed to complying with the United States Foreign Corrupt Practices Act, the United Kingdom Bribery Act, and other anti-corruption laws applicable to the jurisdictions in which it operates. All stakeholders can report suspected cases of corruption anonymously via a designated email address.

In 2024, there were no criminal, administrative, or civil proceedings brought against CMOC pertaining to corruption, bribery, blackmail, fraud, or money laundering.

## Data Overview

EMPLOYMENT	2024	2023	2022	2021	2020
Total number of employees	12,317	11,995	12,754	11,472	10,956
Total number of contractors	21,494	20,640	20,186	13,222	10,684
<b>Number of employees and contractors by gender</b>					
Female	3,425	3,196	3,314	3,081	3,025
Male	30,386	29,439	29,626	21,613	18,615
<b>Number of employees and contractors by age</b>					
Under 30 years old	8,335	9,972	8,033	6,049	3,760
30~50 years old	21,043	18,444	20,128	14,761	14,574
Over 50 years old	4,433	4,219	4,779	3,884	3,306
<b>Number of employees and contractors by region</b>					
China	6,259	5,494	5,914	6,054	6,368
Brazil	4,686	4,764	4,467	4,303	3,880
DRC	22,361	21,499	21,668	13,478	10,541
IXM	505	478	506	428	384
Australia (sold)		400	385	431	467
<b>Turnover rate</b>					
Turnover rate of employees	7.8%	7.3%	5.9%	8.1%	24.2%
Turnover rate of contractors	32.7%	36.7%	22.5%	22.4%	
<b>Turnover rate of employees and contractors by gender</b>					
Female	16.5%	13.4%	12.0%	10.7%	9.3%
Male	26.2%	29.7%	16.5%	17.1%	26.6%
<b>Turnover rate of employees and contractors by age</b>					
Under 30 years old	29.1%	28.6%	21.0%	25.8%	16.4%
30~50 years old	24.7%	30.2%	15.1%	13.4%	19.7%
Over 50 years old	20.7%	18.1%	10.9%	9.8%	6.9%

Turnover rate of employees and contractors by region					
China	7.2%	7.6%	5.9%	7.6%	3.8%
Brazil	40.9%	21.6%	30.5%	16.2%	32.1%
DRC	25.5%	33.8%	14.8%	19.8%	37.2%
IXM	18.2%	22.4%	13.8%	10.6%	12.0%
Australia (sold)		12.9%	23.0%	19.7%	14.8%

SAFETY	2024	2023	2022	2021	2020
Fatalities	5	3	0	0	2
Total recordable injuries	63	72	57	41	52
TRIR	0.71	0.85	0.76	0.74	1.25
Total lost time injuries	16	24	13	6	12
LRIR	0.18	0.28	0.17	0.11	0.29

TRAINING	2024	2023	2022	2021	2020
Rate of employees and contractors trained	89.6%	93.9%	90.3%	82.5%	91.4%
Rate of employees and contractors trained by gender					
Female	87.3%	84.5%	80.7%	75.0%	86.0%
Male	89.8%	94.9%	91.4%	83.5%	92.3%
Rate of employees and contractors trained by job category					
Senior management	98.6%	83.7%	81.1%	40.0%	60.3%
Middle management	94.8%	91.2%	97.1%	82.5%	84.0%
Staff	89.0%	94.2%	89.4%	82.9%	91.9%
Training hours of employees and contractors					
Training hours of employees and contractors	28.8	23.4	22.7	20.9	28.8
Training hours of employees and contractors by gender					
Female	39.4	23.8	22.8	38.9	13.1
Male	27.6	23.3	22.7	18.3	31.4



### Training hours of employees and contractors by job category

Senior management	21.9	13.6	17.1	4.0	13.0
Middle management	26.3	32.7	22.0	25.8	57.2
Staff	29.1	22.7	22.9	20.8	27.6

### EMISSIONS AND WASTE<sup>[1]</sup>

	2024	2023	2022	2021	2020
Total greenhouse gas emissions (thousand tonnes)	2,000	1,590	1,320	920	1,030
Intensity of total GHG emissions (tonnes per tonne of processed ore)	0.034	0.028	0.028	0.020	0.025
GHG emissions– scope1	1,340	1,070	760	360	530
GHG emissions– scope2	660	520	560	560	500
Total NOx emissions (thousand tonnes)	3.4	3.1	2.6	2.3	1.8
Total SOx emissions (thousand tonnes)	2.7	2.6	2.9	3.0	2.4
Total PM emissions (thousand tonnes)	0.9	1.0	0.7	0.7	1.0
Total emissions of hazardous waste (thousand tonnes)	58.0	55.0	54.0	52.0	32.0
Intensity of hazardous waste (tonnes per tonne of processed ore)	$9.812 \times 10^{-4}$	$9.752 \times 10^{-4}$	$1.127 \times 10^{-3}$	$1.143 \times 10^{-3}$	$7.619 \times 10^{-4}$
Total emissions of non-hazardous waste (thousand tonnes)	78.0	84.0	86.0	81.0	76.0
Intensity of non-hazardous waste (tonnes per tonne of processed ore)	$1.320 \times 10^{-3}$	$1.489 \times 10^{-3}$	$1.795 \times 10^{-3}$	$1.781 \times 10^{-3}$	$1.810 \times 10^{-3}$
Waste rocks (million tonnes)	355.0	332.0	264.0	132.0	111.0
Tailings (million tonnes)	58.0	49.0	45.0	43.0	39.0

### WATER CONSUMPTION

	2024	2023	2022	2021	2020
Total water consumption (million cubic meters)	234.0	180.0	126.0	133.0	128.0
Intensity of water consumption (cubic meters per tonne of processed ore)	3.959	3.191	2.629	2.924	3.048

### ENERGY CONSUMPTION

	2024	2023	2022	2021	2020
Total energy consumption (MWh)	7,170,000	5,800,000	4,230,000	3,800,000	3,290,000
Intensity of energy consumption (MWh per tonne of processed ore )	0.121	0.103	0.088	0.084	0.078

COMMUNITY SPENDING	2024	2023	2022	2021	2020
Total (RMB millions)	458.9	295.6	290.4	194.9	156.4

SUPPLY CHAIN MANAGEMENT	2024	2023	2022	2021	2020
Total number of suppliers	3,047	3,087	4,642	5,434	4,009
<b>Number of suppliers by region</b>					
Asia	819	740	839	794	648
Africa	347	450	1,329	1,835	1,582
South America	1,838	1,173	1,365	1,464	814
North America	18	19	303	419	420
Europe	18	32	104	171	152
Oceania	7	673	702	751	393

**Note:**

[1] In 2024, we revised the PM emissions reporting scope to include only organized emissions. We also reallocated slags from the tailings category to the hazardous and non-hazardous waste categories. To ensure accuracy and consistency, we have retrospectively restated the relevant data for the reporting period from 2020 to 2023 to reflect these changes.

**Standards and methodologies used in calculation:**

1、Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. The data calculation was based on the *Greenhouse Gas Emission Accounting Methodology and Reporting Guidelines for Mining Companies (for Trial Implementation)* issued by the National Development and Reform Commission of China and the *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories* issued by the United Nations Intergovernmental Panel on Climate Change.

Scope 2 GHG is calculated by region based on the average CO<sub>2</sub> emission factors of China's regional power grids published by the National Development and Reform Commission of China and the average CO<sub>2</sub> emission factors published by the Brazilian Ministry of Science, Technology, Innovation and Communication.

2、NO<sub>x</sub>、SO<sub>x</sub>、PM data sources were monitoring systems installed or third-party commissioned for monitoring. The calculation was based on factors from the *EMFAC-HK Vehicle Emission Calculation* issued by the Hong Kong Environmental Protection Department, the *Technical Air Pollution Resources* issued by the U.S. Environmental Protection Agency, the *National Pollutant Inventory* issued by the DRC, and the *2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories* issued by the United Nations Intergovernmental Panel on Climate Change.

3、The Hazardous waste was classified according to "hazardous waste" as stipulated in the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* as mentioned in the *Guidelines on Reporting of Environmental Key Performance Indicators* published by the HKEX. The data sources were the relevant records and ledgers.

4、The non-hazardous waste was all waste that does not fall within the definition of "hazardous waste" of the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*. The data sources were the relevant records and ledgers.

5、Water consumption: the data sources were monitoring systems installed or third parties commissioned for monitoring.

6、Energy consumption: the calculation was based on purchased electricity and fuel consumption, with relevant conversion factors issued by the International Energy Agency.

## ESG Content Index

HKEX ESG Reporting Guide	Description	Location/Remarks
<b>A.Environment</b>		
<b>Aspect A1 Emission</b>		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste	Environment
KPI A1.1	The types of emissions and respective emissions data	Environment
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Environment
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Environment
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	Environment
KPI A1.5	Description of emission target(s) set and steps taken to achieve them	Environment
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Environment
<b>Aspect A2: Use of Resources</b>		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	Environment
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility)	Environment
KPI A2.2	Water consumption in total and in intensity (e.g. per unit of production volume, per facility)	Environment
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Environment
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Environment

KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced	Not mentioned: this is not a material issue for CMOC
<b>Aspect A3: The Environment and Natural Resources</b>		
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources	Environment
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them	Environment
<b>Aspect A4: Climate Change</b>		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer	Environment
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them	Environment

## B.Social

### Aspect B1: Employment

General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare	Employees
KPI B1.1	Total workforce by gender, employment type, age group and geographical region	About CMOC; Employees
KPI B1.2	Employee turnover rate by gender, age group and geographical region	Employees; Data Overview

### Aspect B2: Health and Safety

General Disclosure	Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards	Employees
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year	Data Overview
KPI B2.2	Lost days due to work injury	Employees

KPI B2.3	Description of occupational health and safety measures adopted, how implemented and monitored	Employees
<b>Aspect B3: Development and Training</b>		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities	Employees
KPI B3.1	Percentage of employees trained by gender and employee category (e.g. senior management, middle management)	Employees
KPI B3.2	Average training hours completed per employee by gender and employee category	Employees; Data Overview
<b>Aspect B4: Labour Standards</b>		
General Disclosure	Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour	Employees; Product
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour	Employees
KPI B4.2	Description of steps taken to eliminate such practices when discovered	Employees
<b>Aspect B5: Supply Chain Management</b>		
General Disclosure	Policies on managing environmental and social risks of the supply chain	Product
KPI B5.1	Number of suppliers by geographical region	Product
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how implemented and monitored	Product
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored	Product
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored	Product
<b>Aspect B6: Product Responsibility</b>		
General Disclosure	Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress	Product

KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons	Not mentioned: this is not a material issue for CMOC.
KPI B6.2	Number of products and service-related complaints received and how dealt with	Not mentioned: this is not a material issue for CMOC.
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights	Not mentioned: this is not a material issue for CMOC.
KPI B6.4	Description of quality assurance process and recall procedures	Product
KPI B6.5	Description of consumer data protection and privacy policies, how implemented and monitored	Not mentioned: this is not a material issue for CMOC.
<b>Aspect B7: Anti-corruption</b>		
General Disclosure	Information on: (a) policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering	About CMOC; Product
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases	Product
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how implemented and monitored	Product
KPI B7.3	Description of anti-corruption training provided to directors and staff	Product
<b>Aspect B8: Community</b>		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests	Community
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport)	Community
KPI B8.2	Resources contributed (e.g. money or time) to the focus area	Community

## GRI Content Index

Statement of Use	CMOC has reported in accordance with the GRI Standards for period 1 January 2024 to 31 December 2024
The Use of GRI 1	GRI 1: Foundation 2021
The Use of GRI Industry Guidelines	Not applicable

GRI Guidelines	Disclosure	Location/Remarks
GRI 1: Foundation 2021		
GRI 2: General Disclosures 2021		
<b>1. The organization and its reporting practices</b>		
2-1	Organizational details	About this Report
2-2	Entities included in the organization's sustainability reporting	About CMOC; HKEx: 2024 Annual Report
2-3	Reporting period, frequency and contact point	About this Report
2-4	Restatements of information	Data Overview
2-5	External assurance	About this Report; Assurance Statement
<b>2. Activities and workers</b>		
2-6	Activities, value chain and other business relationships	About CMOC; Product
2-7	Employees	About CMOC; Employees
2-8	Workers who are not employees	About CMOC; Employees
<b>3. Governance</b>		
2-9	Governance structure and composition	Management Approach; HKEx: 2024 Annual Report
2-10	Nomination and selection of the highest governance body	HKEx: Articles of Association; HKEx: 2024 Annual Report
2-11	Chair of the highest governance body	HKEx: 2024 Annual Report
2-12	Role of the highest governance body in overseeing the management of impacts	Management Approach; HKEx: 2024 Annual Report; Company Website: Detailed Working Rules of the Strategic and Sustainability Committee
2-13	Delegation of responsibility for managing impacts	Management Approach; Company Website: Detailed Working Rules of the Strategic and Sustainability Committee
2-14	Role of the highest governance body in sustainability reporting	Management Approach; Company Website: Detailed Working Rules of the Strategic and Sustainability Committee
2-15	Conflicts of interest	HKEx: 2024 Annual Report

2-16	Communication of critical concerns	Management Approach
2-17	Collective knowledge of the highest governance body	Management Approach
2-19	Remuneration policies	Management Approach;Employees;HKEx: 2024 Annual Report
2-20	Process to determine remuneration	HKEx: 2024 Annual Report
2-21	Annual total compensation ratio	Confidential information
<b>4. Strategy, policies and practices</b>		
2-22	Statement on sustainable development strategy	About this Report
2-23	Policy commitments	Management Approach
2-24	Embedding policy commitments	Management Approach; Product
2-25	Processes to remediate negative impacts	Management Approach
2-26	Mechanisms for seeking advice and raising concerns	Management Approach
2-27	Compliance with laws and regulations	Management Approach
2-28	Membership associations	About CMOC
<b>5. Stakeholder engagement</b>		
2-29	Approach to stakeholder engagement	Management Approach; Community
2-30	Collective bargaining agreements	Employees
<b>GRI 200: Economic</b>		
<b>GRI 201: Economic Performance 2016</b>		
201-1	Direct economic value generated and distributed	About CMOC
201-2	Financial implications and other risks and opportunities due to climate change	Environment
201-4	Financial assistance received from government	HKEx: 2024 Annual Report
<b>GRI 203: Indirect Economic Impacts 2016</b>		
203-1	Infrastructure investments and services supported	Community
203-2	Significant indirect economic impacts	Community
<b>GRI 204: Procurement Practices 2016</b>		
204-1	Proportion of spending on local suppliers	Product



GRI 205: Anti-corruption 2016		
205-1	Operations assessed for risks related to corruption	Product
205-2	Communication and training about anti-corruption policies and procedures	Product
205-3	Confirmed incidents of corruption and actions taken	Product
GRI 300: Environment		
GRI 301: Materials 2016		
301-1	Materials used by weight or volume	Not mentioned: this is not a material issue for CMOC.
GRI 302: Energy 2016		
302-1	Energy consumption within the organization	Environment
302-3	Energy intensity	Environment
GRI 303: Water and Effluents 2018		
303-1	Interactions with water as a shared resource	Environment
303-3	Water withdrawal	Environment
GRI 304: Biodiversity 2016		
304-2	Significant impacts of activities, products, and services on biodiversity	Environment
GRI 305: Emissions 2016		
305-1	Direct (Scope 1) GHG emissions	Environment
305-2	Energy indirect (Scope 2) GHG emissions	Environment
305-4	GHG emissions intensity	Environment
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Environment
GRI 306: Waste 2020		
306-1	Waste generation and significant waste-related impacts	Environment
306-2	Management of significant waste-related impacts	Environment
306-3	Waste generated	Environment
GRI 308: Supplier-Environmental-Assessment 2016		
308-1	New suppliers screened using environmental criteria	Product
308-2	Negative environmental impacts in supply chain and actions taken	Product

**GRI 400: Social****GRI 401: Employment 2016**

401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employees
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**GRI 402: Labor Management Relations 2016**

402-1	Minimal notices regarding operational changes	Employees
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**GRI 403: Occupational Health and Safety 2018**

403-1	Occupational health and safety management system	Employees
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403-2	Hazard identification, risk assessment, and incident investigation	Employees
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403-3	Occupational health services	Employees
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403-5	Worker training on occupational health and safety	Employees
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403-6	Promotion of worker health	Employees
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403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Employees
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403-8	Workers covered by an occupational health and safety management system	Employees
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403-9	Work-related injuries	Employees
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**GRI 404: Training and Education 2016**

404-1	Average hours of training per year per employee	Employees
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404-2	Programs for upgrading employee skills and transition assistance programs	Employees
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**GRI 405: Diversity and Equal Opportunity 2016**

405-1	Diversity of governance bodies and employees	Employees; HKEx: 2024 Annual Report
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**GRI 406: Non-discrimination 2016**

406-1	Incidents of discrimination and corrective actions taken	Management Approach
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**GRI 407: Freedom of Association and Collective Bargaining 2016**

407-1	Operations and suppliers where the right to freedom of association and collective bargaining may be at risk	Employees
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**GRI 408: Child Labor 2016**

408-1	Operations and suppliers at significant risk for incidents of child labor	Employees; Product
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**GRI 409: Forced or Compulsory Labor 2016**

409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employees; Product
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GRI 410: Security Practices 2016		
410-1	Security personnel trained in human rights policies or procedures	Community; Product
GRI 411: Rights of Indigenous Peoples 2016		
411-1	Incidents of violations involving rights of indigenous peoples	No such incidents
GRI 413: Local Communities 2016		
413-1	Operations with local community engagement, impact assessments, and development programs	Community
GRI 414: Supplier Social Assessment 2016		
414-1	New suppliers screened using social criteria	Product
414-2	Negative social impacts in supply chain and actions taken	Product
GRI 415: Public Policy 2016		
415-1	Political contributions	No political contributions
GRI 416: Customer Health and Safety 2016		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Product
GRI 417: Marketing and Labeling 2016		
417-1	Requirements for product and service information and labelling	Product
417-2	Incidents of non-compliance concerning product and service information and labelling	Product

## ASSURANCE STATEMENT: Product Control and Custody at TFM

The management of Tenke Fungurume Mining S.A. (TFM) asked Corporate Integrity Ltd to review product control and custody procedures at the TFM concession in the Democratic Republic of Congo (DRC) and to provide assurance over the following statement:

*“Tenke Fungurume Mining S.A. (TFM), an industrial copper and cobalt mine in southeastern DRC and an affiliate of CMOC, is committed to apply a duty of care in product stewardship commensurate with the concerns of its customers in the international minerals supply chain.*

*TFM implements robust product control and custody procedures to ensure that it mines, processes and sells only those minerals that originate within its mining concession and that are mined by its own operations. These procedures include specific actions to dispose of illegally mined ore confiscated by government authorities within the TFM concession. TFM does not purchase or process ore from any other source. TFM maintains a system to track the copper and cobalt products produced at its operations through the points of transfer, and to the final point of delivery to its customers.*

*TFM is implementing policies and procedures to meet the requirements of the Responsible Minerals Initiative’s Risk Readiness Assessment (RRA) and OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas Annex 1 and 2 (OECD DDG). This implementation is a demonstration of the company’s commitment to a responsible mining operation and supply chain, further aligning with other international good practice frameworks that seek elimination of child labor, forced labor and gross violations of human rights.*

*Due to the importance of monitoring and maintaining these procedures in managing TFM’s mineral supply chain, TFM engages independent assurance of the company’s product control and custody procedures.”*

Our review was based on a site visit in January 2024 and a remote review in January 2025, which included the following activities.

- Review of procedures in place at the operation for control, custody and tracking of product;
- Review of procedures in place at the operation for the confiscation and disposal of illegally mined ore in the area;
- Interviews with relevant personnel at the site;
- Visit to the confiscated product storage and disposal site (January 2024 only);
- Reviews of trends in rates of confiscation and disposal; and
- Review of samples of documents used for recording and reporting the control, custody and tracking of product from the mine concession area.

### Our Findings

Based on our review, its scope and limitations, nothing has come to our attention that prevents us from concluding that TFM’s assertions in the above statement are fair and reasonable.

### Limitations of the Work Performed

This work has been carried out by checking samples of information and documents that have been made available during the period of assurance activity by TFM. Our evidence gathering procedures have been designed to obtain a limited level of assurance on which to base our conclusions. Corporate Integrity excludes any liability, including liability for negligence, for any loss, including indirect or consequential damages arising from or in relation to the use of the information contained in this report.

### Statement of Independence

The independence of our team has been reviewed and none of the Corporate Integrity Ltd. assessors involved in this project presents a conflict of interest to the integrity of this assurance statement.

### Standard Applied to This Engagement

International Standard on Assurance ISEA3000 (revised) — Assurance Engagements other than Audits & Reviews of Historical Financial Information’ issued by the International Auditing and Assurance Standards Board (IAASB).

*David Shirley (Director) and Raj Aseervatham (Director)*

*20th March 2025*

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## ASSURANCE STATEMENT

The CMOC Environmental Social and Governance (ESG) Report for 2024 has been prepared by the management of CMOC Group Limited (CMOC), who are responsible for the collection and presentation of this information.

### Scope

Corporate Integrity Ltd., in accordance with CMOC management's instructions, was asked to perform:

1. A review of policies and systems in place at the CMOC's operations in relation to CMOC's commitments to align with the Responsible Minerals Initiative's Risk Readiness Assessment (the RRA). The operations covered by this review were the TFM and KFM operations in the Democratic Republic of Congo, the CMOC China (Sandaozhuang and Shangfanggou) operations, the IXM global operations and the CMOC Brasil operations; and
2. A review of statements in relation to the above operations made in the CMOC ESG Report covering the 2024 reporting year.

This included a review of corporate activities relating to the above sites. All other operations are excluded from the scope of this assurance statement.

### Key Findings

Based on our review, its scope and limitations, nothing has come to our attention which causes us to believe:

- That the policies and systems in place at the above mentioned operations are not in material alignment with RRA; and
- That the statements reported relating to the above mentioned operations in the CMOC ESG Report for 2024 have been materially mis-stated.

### Methodology

The assurance process involved selective reviews of documents submitted for each above mentioned operation and corporate, physical site visits, including interviews with management, employees, contractors and community stakeholders and interviews with corporate personnel. The process included:

- Site visits to the TFM and KFM operations, DRC in Jan 2024 and a follow up remote assessment in Feb 2025;
- Site visits to CMOC Head Office and an in-country review with management of Sandaozhuang and Shangfanggou operations (note that a physical site visit was not possible due to security reasons)
- A site visit to CMOC Brasil operations in November 2023 and a follow up remote assessment in Feb 2025;
- A site visit to IXM Head Office in Geneva, Switzerland in Feb 2025.

The assurance activity focused specifically on:

- A review of CMOC policies and their coverage of and alignment with the RRA (note that for all sites other than CMOC Brasil the reference document was RRA Version 3, for CMOC Brasil the reference document was RRA Version 2);
- A review of processes in place to identify and prioritise ESG risks and opportunities during the reporting period, and the results of that process;
- A review of the systems and approaches that CMOC is using to manage its identified material ESG risks and opportunities; and
- A review of statements and assertions made in the CMOC ESG Report for 2024.

### Limitations of the Work Performed

This work has been carried out by checking samples of statements and documents that have been made available during the period of assurance activity by CMOC. Where such statements were deemed independently verified by other third parties commissioned by CMOC, this was not subjected to re-verification by Corporate Integrity Ltd. Our procedures have been designed to obtain a limited level of assurance upon which to base our conclusions, and our assurance findings are conditional upon fact-checking at sites. Corporate Integrity excludes any liability, including liability for negligence, for any loss, including indirect or consequential damages arising from or in relation to the use of the information contained in this report.

### Statement of Independence

The independence of our team has been reviewed and none of the Corporate Integrity Ltd. assessors involved in this project presents a conflict of interest to the integrity of this assurance statement.

### Standard Applied to This Engagement

International Standard on Assurance ISEA3000 (revised) – Assurance Engagements other than Audits & Reviews of Historical Financial Information’ issued by the International Auditing and Assurance Standards Board (IAASB).

*David Shirley (Director) and Raj Aseervatham (Director)*

*20th March 2025*

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# CMOC Task Force on Climate-related Financial Disclosures (TCFD) Report 2024

As a multinational company with diversified operations and world-class resources, CMOC is acutely aware of the profound impacts of climate change on the environment and society. The climate crisis not only challenges our own operations but also threatens the global food supply, disrupts industrial production, and exacerbates humanitarian crises. In recent years, multiple locations across the countries and regions where we operate have experienced extreme weather events, underscoring the urgent need for global collaboration on climate action and reinforcing the responsibility and mission that a mining company must uphold.

In January 2022, the Board discussed and approved the Group's Climate Change Vision, formally integrating climate change into CMOC's ESG governance framework under the oversight of the Strategic and Sustainability Committee. This established a top-down management system for addressing climate change. To realize this vision, in 2023

CMOC developed a Carbon Neutral Roadmap that defines ambitious targets and implementation strategies to achieve peak carbon emissions by 2030 and net-zero by 2050. The company has also committed to supporting the Intergovernmental Panel on Climate Change (IPCC) initiative to limit global warming to 1.5°C above pre-industrial levels. In January 2024, CMOC formulated the CMOC 2030 Peak Carbon Emissions Implementation Plan (2023 Edition), taking a significant step toward achieving carbon neutrality.

In 2024, CMOC systematically identified, assessed, and analyzed climate-related risks and opportunities in line with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and developed corresponding response plans. In 2025, we updated physical risk assessments for all mining sites using the latest external climate data and conducted financial impact modeling to quantify the potential impacts of key risks and opportunities. As CMOC has announced the

sale of the Donggebi Molybdenum Mine, this site is no longer covered in the current risk assessment.

This section outlines CMOC's approach to identifying, assessing, and managing climate-related risks and opportunities, along with the corresponding evaluation and analysis results. It also details the company's progress in strengthening climate resilience and future planning efforts. The table below presents the disclosure status and corresponding sections of key TCFD recommendations, along with explanations of next steps for areas where full disclosure has yet to be achieved.

TCFD Disclosure Index

	TCFD recommendations	2024 disclosure status	Index
Governance	a) Board's oversight of climate-related risks and opportunities.	Disclosed	1. Governance
	b) Management's role in assessing and managing climate-related risks and opportunities.	Disclosed	1. Governance
Strategy	a) The climate-related risks and opportunities the organization has identified.	Disclosed	2.2 Analysis of climate-related risks and opportunities
	b) The impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Disclosed	2.2 Analysis of climate-related risks and opportunities
	c) The resilience of the organization's strategy.	Disclosed	2.1 Scenario analysis 2.2 Analysis of climate-related risks and opportunities
Risk Management	a) The organization's processes for identifying and assessing climate-related risks.	Disclosed	2.1 Scenario analysis 3.1 Climate-related risk identification and assessment process
	b) The organization's processes for managing climate-related risks.	Disclosed	3.2 Climate-related risk and opportunity management practices
	c) How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Disclosed	3.1 Climate-related risk identification and assessment process 3.2 Climate-related risk and opportunity management practices
Metrics and Targets	a) The metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Partially disclosed	4. Metrics and Targets Formulation of metrics and targets: CMOC plans to increase the disclosure of climate-related metrics and targets to be set based on the quantitative assessments of financial impact.
	b) Disclose greenhouse gas (GHG) emissions and the related risks.	Disclosed	Environment chapter of the ESG report
	c) The targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Disclosed	4. Metrics and targets Environment chapter of the ESG report

# 1 Governance

CMOC has incorporated climate-related responsibilities into the company's ESG governance framework. Within our three-tier ESG management framework, we have clearly defined specific responsibilities, communication frequencies, and mechanisms for the Board, executive management, and individual operating sites. This ensures comprehensive management and effective execution from the top down.

CMOC Climate Governance Framework

Board of Directors	<b>Board oversight</b>	
	<p><b>Strategic and Sustainability Committee</b> Frequency: Annual Responsibilities:</p> <ul style="list-style-type: none"> <li>Overall supervision of climate change-related matters, including the identification, assessment, and management of climate-related risks and opportunities</li> <li>Formulating climate resilience strategies based on internal and external circumstances, reviewing and periodically assessing relevant management methods, and providing recommendations for improvement</li> <li>Monitoring and supervising progress in climate-related metrics and targets</li> </ul>	<p><b>Audit and Risk Committee</b> Frequency: Annual Responsibilities:</p> <ul style="list-style-type: none"> <li>Regularly reviewing, monitoring, and managing climate-related risks in business operations</li> <li>Integrating climate-related risks into the organization's comprehensive risk management processes</li> </ul>
Executive management	<p><b>Group Vice President in charge of ESG:</b> Fully responsible for the company's sustainability, including overseeing the development and execution of the climate-related policies and strategies; also presides over the Sustainability Executive Committee.</p>	
	<p><b>Sustainability Executive Committee</b> Frequency: Quarterly Composition:</p> <ul style="list-style-type: none"> <li>Members are drawn from the Board Office, HSE, Internal Control and Audit, Legal and Compliance, Global Supply Chain, Human Resources, Business Development, Anti-Corruption, and ESG departments</li> </ul> <p><b>Responsibilities:</b></p> <ul style="list-style-type: none"> <li>Facilitating communication and collaboration among various functional departments on material ESG issues, including climate-related matters, and seeking cross-departmental solutions</li> </ul>	<p><b>ESG Department</b> Frequency: Daily Responsibilities:</p> <ul style="list-style-type: none"> <li>Formulating and implementing measures related to climate change, coordinating across functional departments, and advancing the climate resilience strategy according to established timelines and milestones</li> <li>Regularly monitoring and tracking the progress of climate-related targets at the Group and operating site levels; periodically updating strategic emission reduction plans in response to actual developments; reviewing the compliance, feasibility, and effectiveness of workflows; and offering suggestions for improvement as needed</li> <li>Providing feedback to the CEO and the Strategic and Sustainability Committee</li> </ul>
<p><b>Operating sites:</b> Each individual operating site implements the Group's climate-related policies and strategies</p>		

ESG and climate change are crucial topics for routine review and decision-making by the Board of Directors. The Strategic and Sustainability Committee reports annually to the Board, ensuring that the latter is regularly informed about the progress of climate-related affairs. This ensures the timely integration of climate considerations into the company's strategic planning, business models, and other decision-making processes.

Record of Board Deliberations on Climate Change-related Issues

Date	Management Level	Agenda	Conclusion
January 2022	Board of Directors	Climate change vision	Board approval and release of the Climate Change Vision
January 2023	Board of Directors	Establishment of ESG Department	Board approval for the establishment of the ESG Department
March 2023	Board of Directors	Carbon neutrality	Board approval of the Carbon Neutral Roadmap and Action Plan
March 2024	Board of Directors	Risk register	Board review of risk register (including for climate-related risks)
March 2024	Board of Directors	TCFD report	Board review of the 2023 TCFD report
March 2025	Board of Directors	Risk register	Board review of risk register (including for climate-related risks)
March 2025	Board of Directors	TCFD report	Board review of the 2024 TCFD report



## 2 Strategy

CMOC recognizes that it is crucial to clearly identify climate-related risks and opportunities and their potential impact on the business to effectively address the challenges of climate change. We engaged a globally renowned consulting firm to assist us in a comprehensive examination of the correlation between the types of climate-related risks and opportunities outlined by the TCFD and our company's operations. Using scientifically sound climate scenario models and parameters, we identified, assessed, and prioritized these climate-related risks and opportunities. Building on the insights of this analysis, our internal management collaborated with external experts to explore climate response strategies, with a view to incorporating climate-related considerations into our strategic planning and business models.

We took the following steps to evaluate the potential impact of climate change on our business:

1. Identification	2. Qualitative assessment	3. Prioritization	4. Quantitative assessment
<ul style="list-style-type: none"> <li>We conducted in-depth interviews with various functional departments and operational units, as well as extensive desktop surveys and industry analysis, to identify climate-related physical risks faced by the company, as well as transition risks and opportunities.</li> <li>We identified the climate-related risk exposure of business activities across the value chain.</li> </ul>	<ul style="list-style-type: none"> <li>We performed climate scenario analysis, selecting key parameters to evaluate the potential impact of climate-related risks and opportunities identified in Step 1 for different scenarios and time frames.</li> <li>Internal management worked with external experts to assess the severity of risks, considering dimensions such as likelihood, impact, adaptability, and recovery.</li> </ul>	<ul style="list-style-type: none"> <li>We synthesized the results of the qualitative assessment in Step 2 to prioritize climate-related risks and opportunities and create a risk register.</li> <li>We analyzed the feasibility of conducting quantitative assessments, considering factors such as defining assessment levels, data availability, connection to financial performance, and consistency with standard practices.</li> </ul>	<ul style="list-style-type: none"> <li>We linked significant climate-related risks to corresponding business areas, identified hotspots of climate-related business impacts. This was used as a basis to formulate climate-related parameters, indicators, and targets.</li> <li>We established associations between parameters, indicators, and relevant financial items to quantitatively estimate financial impacts.</li> </ul>

### 2.1 Scenario analysis

The impacts of climate change are uncertain over various time frames. Scenario analysis helps us to thoroughly assess how climate-related risks and opportunities might affect our business. This, in turn, allows for a more accurate formulation of climate strategies and risk management measures. By utilizing publicly available climate scenario data, CMOC conducted forward-looking analyses on identified climate-related risks and opportunities in the short, medium, and long term, describing the relationship and trends between our business and climate-related risks and opportunities through a combination of qualitative and quantitative methods.

#### Scenario analysis principles

Time horizon	Consistent with time horizons for strategic carbon neutrality targets and action plans developed by CMOC: Short-term (by 2030); Medium-term (2030–2040), Long-term (2040–2050).
Scope	The included entities are consistent with the 2024 annual report.
High contrast	To fully consider the physical and transition risks arising from climate change, we chose two highly contrasting scenarios. The higher emissions scenario brings higher physical risks, while the low-carbon scenario entails higher transition risks.
Balanced	The formulated scenarios take into account socio-economic impacts, and the impact on entities.
Science-based	Scenarios utilize the following publicly available data sources: <ol style="list-style-type: none"> <li>Network for Greening the Financial System (NGFS) – Climate Scenarios for central banks and supervisors – Phase IV</li> <li>International Energy Agency (IEA) – <i>World Energy Outlook 2023 (WEO 2023)</i> climate scenario data.</li> <li>Intergovernmental Panel on Climate Change (IPCC) – Sixth Assessment Report (AR6) – Shared Socioeconomic Pathways (SSPs).</li> </ol>

## Scenario formulation

Based on the aforementioned principles, CMOC developed two sets of climate scenarios to evaluate the potential impacts on the company as it implements its 2050 carbon neutrality roadmap:

Scenario category	Low emissions scenario	High emissions scenario
Temperature rise	<ul style="list-style-type: none"> <li>Below 1.5°C</li> </ul>	<ul style="list-style-type: none"> <li>Above 2.4°C</li> </ul>
Scenario description	<ul style="list-style-type: none"> <li>The international community takes urgent and ambitious actions to reduce emissions, so as to transition to a zero-carbon economy and realize the ambitious goal of the Paris Agreement, namely to limit global warming to 1.5°C above pre-industrial levels.</li> <li>Incentive policies are actively implemented and carbon pricing mechanisms developed to promote continuous growth in market demand for low-carbon products and services.</li> </ul>	<ul style="list-style-type: none"> <li>A business-as-usual scenario, where global climate actions are largely limited to the current policy framework, and greenhouse gas emissions continue to rise. This results in sustained global warming, significantly increasing exposure to physical climate risks. Businesses will experience more severe impacts of climate change, including direct asset losses and indirect effects such as disruptions in the supply chain.</li> </ul>
Transition risk assessment scenarios	<ul style="list-style-type: none"> <li>IEA Net Zero Emissions by 2050 (NZE) Scenario</li> <li>NGFS Net Zero 2050 Scenario</li> </ul>	<ul style="list-style-type: none"> <li>IEA Stated Policies Scenario (STEPS)</li> <li>NGFS Current Policies Scenario</li> </ul>
Physical risk assessment scenarios	<ul style="list-style-type: none"> <li>IPCC SSP1-2.6</li> </ul>	<ul style="list-style-type: none"> <li>IPCC SSP5-8.5</li> </ul>

## 2.2 Analysis of climate-related risks and opportunities

Building upon the chosen climate scenarios and recognized categories of climate-related risks and opportunities, CMOC pinpointed key parameters for scenario analysis. These were chosen with consideration to the company’s operational nature and geographic context. We integrated the findings of the climate-related risk review and scenario analysis to thoroughly evaluate and prioritize the primary climate-related risks and opportunities identified for CMOC. Based on this information, we created a Group climate-related risk and opportunity register. The register encompasses 1) transition risks and opportunities related to the transition to a low-carbon economy, and 2) physical risks linked to the physical impacts of climate change.

### 2.2.1 Transition risks and opportunities

The following table outlines the scenario parameters used to evaluate climate-related transition risks and opportunities for CMOC, along with the reasons why they were chosen:

Scenario parameters - Transition risks and opportunities

Parameter	Reason for selection
Carbon price	The carbon price stands as a core factor in measuring future carbon emission costs, directly influencing a company’s financial decisions, particularly in terms of costs and benefits in a low-carbon economy. This parameter trended upward in both scenarios, with an acceleration trend over time. According to the latest data from IEA WEO2023, carbon prices in emerging market and developing economies (including China, Brazil, and South Africa) are projected to reach USD 200 per tonne of carbon dioxide by 2050 in the NZE Scenario.
CO <sub>2</sub> intensity of GDP	CO <sub>2</sub> intensity of GDP directly reflects the relationship between economic activities and carbon emissions. As the entire value chain moves toward a low-carbon economy, this parameter will reflect changes in policy, economic structure, and other factors. This parameter declined in both scenarios, accelerating over time.
CO <sub>2</sub> intensity of electricity generation	Given that energy consumption is a major source of carbon emissions, strengthened global carbon reduction policies are expected to drive the adoption of clean energy, reducing carbon emissions in the electricity sector. This parameter declined in both scenarios, accelerating over time. According to the latest data from IEA WEO2023, the global electricity sector is expected to achieve zero carbon emissions by 2045 in the NZE Scenario.
Per capita CO <sub>2</sub> intensity	With increasing awareness of climate change and the promotion of sustainable development goals, per capita carbon emission intensity reflects the growing demand for low-carbon products and services. This parameter declined in both scenarios, with a sharper decrease under the low emissions scenario.

Parameter		Reason for selection
Transition risks and opportunities	Non-fossil energy investment	The scale of investment in non-fossil energy is directly related to the adoption of low-carbon technologies in the global energy market. As low-carbon transition technologies become more prevalent and mature, related investment pressures are expected to gradually ease. According to the latest data from NGFS, non-fossil energy investment declined on a yearly basis in the Current Policies Scenario, while in the Net Zero 2050 Scenario, investment peaked in 2030 before decreasing annually.
	Share of electricity in transport energy consumption	The share of electricity used in the transportation sector has a direct bearing on carbon emission levels and energy usage patterns, and also indicates the degree of electrification in that sector. This parameter increased in both scenarios, with the latest data from IEA WEO2023 indicating that the share of electricity consumption in the transportation sector will exceed 50% in the Net Zero Emissions Scenario by 2050.
	Share of oil in the global energy supply	As global demand for renewable energy increases and energy markets fluctuate, changes in the global oil supply will directly impact the cost of energy for production and operations. This parameter exhibits a decreasing trend in both scenarios, with a sharper decline in the low emission scenario. According to the latest data from IEA WEO2023, the share of oil in the global energy supply is expected to be below 8% by 2050 in the NZE Scenario.
	Renewable energy capacity	The increase in installed renewable energy capacity reflects the expansion of the global renewable energy market, which provides opportunities for companies to participate and invest in renewable energy projects. This parameter shows an upward trend in both scenarios, with a sharper increase in the low emissions scenario.
	Share of renewables in electricity	The share of renewable energy in total electricity generation reflects the evolution of the global energy landscape, which influences a company's strategic positioning and development trajectory in future energy markets. This parameter shows an upward trend in both scenarios, with a sharper increase in the Low Emissions Scenario. According to the latest data from IEA WEO2023, the share of total electricity generation from renewable energy sources will exceed 70% by 2050 in the NZE Scenario, compared to only about 30% in the STEPS Scenario.

By calculating the differences between key parameters over specific time horizons for low emissions scenario and high emissions scenario, and subsequently applying correlation weightings, we determined the risk levels of various transition risks and opportunities. The table below shows the identified transition risks and opportunities for CMOC and their respective impacts on the business in the short, medium, and long term.

*Transition risk and opportunity register*

Risk and opportunity type	Details		Impact		
			Short-term	Medium-term	Long-term
Transition risks	Policies and legal	T1: Enhanced climate disclosure requirements	High	High	High
		T2: Strengthened emission reduction policies and regulatory efforts	Low	High	High
	Technology	T3: Cost of investments in low-carbon technologies	Medium	Low	Low
	Market	T4: Consumer trend toward low-carbon products and services	Low	Medium	Medium
		T5: Uncertainty in market signals	Medium	High	High
		T6: Increased costs of raw materials	Low	Low	Medium
		T7: Low-carbon transition pressures from supply chain partners	Low	Medium	Medium
	Reputation	T8: Increased concern and feedback from stakeholders	Low	Low	Low
Opportunities	Energy source	O1: Development of renewable energy projects	Low	Medium	Medium
	Products and services	O2: Consumer trend toward low-carbon products and services	Medium	Medium	High
	Resilience	O3: Energy substitution/diversification	Medium	High	High

\*T=Transition risk; O=Opportunity

Risk impact:  Low  Medium  High

Opportunity impact:  Low  Medium  High

The following section provides a detailed analysis of transition risks and opportunities, examining key drivers, potential strategic impacts, and CMOC’s response measures. Additionally, we conducted financial impact modeling for risks and opportunities with a medium to high impact to support the development of more targeted and effective climate risk management strategies.

Policies and legal											
As the world moves toward adopting low-carbon practices, CMOC is poised to confront a growing array of mandatory and voluntary regulatory demands. Notably, the increasingly prevalent global carbon pricing mechanisms stand out as the foremost influential factor. Although CMOC currently isn’t impacted directly by these mechanisms, given its status as a globally operating mining enterprise, there is the potential for future trends to increase our carbon emission costs. There is also the possibility that partners pass along their elevated costs to the supply chain. Concurrently, some regions are implementing tax schemes that encompass not only the company’s self-generated emissions, but also levy taxes on imported goods and services.											
The changes in these regulations and policies could have a substantial impact on CMOC’s operations and cost structure. Hence, it is imperative to closely scrutinize and implement appropriate measures to adeptly respond to regulatory shifts, while ensuring the effective execution of the company’s compliance strategy.											
Drivers	Strategic impacts	Mitigation measures	Impact assessment								
T1: Enhanced climate disclosure requirements	<ul style="list-style-type: none"> <li>The ongoing strengthening of emission reporting standards by regulatory bodies is expected to raise management and disclosure costs for both the Group and its subsidiaries, while also posing a potential reputational threat.</li> </ul>	<ul style="list-style-type: none"> <li>While implementing carbon initiatives, take additional steps to enhance emission monitoring, improve data collection, management, and disclosure capabilities, and thoroughly assess product life-cycle carbon footprints and climate-related financial impacts, and conduct Scope 3 greenhouse gas emissions accounting.</li> </ul>	<table border="1"> <thead> <tr> <th></th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>T1</td> <td>High</td> <td>High</td> <td>High</td> </tr> </tbody> </table>		Short-term	Medium-term	Long-term	T1	High	High	High
	Short-term	Medium-term	Long-term								
T1	High	High	High								
T2: Strengthened emission reduction policies and regulatory efforts	<ul style="list-style-type: none"> <li>Due to the global nature of CMOC’s operations, disparities in climate policies and regulations across regions will present diverse compliance challenges.</li> <li>In the future, CMOC could come under the purview of carbon emission trading regulations. Such inclusion could potentially lead to heightened costs from carbon emission fees.</li> </ul>	<ul style="list-style-type: none"> <li>Closely monitor changes to climate-related policies in our operational regions and promptly identify risks. Formulate a global compliance strategy to effectively navigate diverse regulatory environments.</li> <li>Monitor carbon pricing mechanisms globally, and especially in regions where our assets are located. Actively engage in industry discussions, explore potential involvement in carbon markets, and assess and plan for the anticipated impacts of carbon emission costs.</li> </ul>	<table border="1"> <thead> <tr> <th></th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>T2</td> <td>Low</td> <td>Medium</td> <td>High</td> </tr> </tbody> </table>		Short-term	Medium-term	Long-term	T2	Low	Medium	High
	Short-term	Medium-term	Long-term								
T2	Low	Medium	High								

Risk impact:  Low  Medium  High

Based on our analysis of policy and regulatory transition risks, we identified two key risk drivers with sustained medium- to long-term impacts: T1–Enhanced climate disclosure requirements, and T2–Strengthened emission reduction policies and regulatory efforts. To quantify the financial impact of these risks, we selected carbon pricing and carbon management and disclosure costs as the core variables for analysis. These costs include expenses related to acquiring or developing carbon emissions data systems, hiring carbon management personnel, conducting carbon inventories, and implementing emission reduction projects. The selection of these variables was based on data availability.

To assess these impacts, we developed financial models for two different emission scenarios: STEPS (Stated Policies Scenario) and NZE (Net Zero Emissions by 2050 Scenario). The two models cover the period from 2030 to 2050. Given their long-term nature, we applied the most conservative approach, ensuring that high-uncertainty factors do not unduly influence the results. Key assumptions for this assessment include:

- Scope 1 and Scope 2 emissions from CMOC’s mining segment will be subject to carbon pricing mechanisms from 2030 to 2050.
- CMOC’s Carbon Neutral Roadmap remains unaffected by policy and regulatory changes, and the company will implement its decarbonization strategy as planned.

- Carbon management and disclosure costs are based on internal company forecasts.
- Carbon pricing projections are based on International Energy Agency (IEA) forecasts under different climate scenarios, combined with CMOC’s carbon emissions projections outlined in the Carbon Neutral Roadmap.

Under the STEPS scenario, the financial impact on CMOC remains minimal in the short, medium, and long term (through 2050), due to moderate policies and regulations. Under the NZE scenario, however, the tightening of policies and regulations through 2050 is projected to drive sustained compliance obligations, necessitating ongoing investments in carbon accounting and reporting. However, progressive implementation of CMOC’s Carbon Neutral Roadmap will lead to a gradual reduction in emissions, mitigating the impact of carbon pricing. By 2050, when CMOC achieves carbon neutrality, modeling results under both scenarios indicate that carbon pricing and carbon management and disclosure costs will each account for no more than 0.1% of mining revenue.

Overall, we believe that policy and regulatory transition risks will have a limited financial impact in the future. This is primarily due to CMOC’s climate strategy, which has reduced exposure to policy risks while enhancing resilience to climate change.

**Market**

With the global spotlight on climate change, there is a growing market demand for environmentally friendly and low-carbon products, which could potentially constrain demand for traditional high-carbon products. This shift in market preferences could impact the operational costs and profitability of CMOC’s businesses. Specifically, we anticipate that growing pressures for carbon reduction, driven by demand for low-carbon products, will be transmitted to us through various stages of the supply chain. Therefore, a thorough assessment of market dynamics is imperative. It is essential to flexibly adjust our product portfolio to align with evolving market trends, thereby mitigating the adverse effects of market risks on our operations.

Drivers	Strategic impacts	Mitigation measures	Impact assessment								
<b>T4: Consumer trend toward low-carbon products and services</b>	<ul style="list-style-type: none"> <li>While the carbon footprint of CMOC’s products and its strategic focus on critical metals align with market trends, a rapid transition to low-carbon consumption behavior is expected to squeeze the profit margins of both low-carbon and critical mineral products.</li> </ul>	<ul style="list-style-type: none"> <li>Stay vigilant to market signals, including evolving trends in the renewables sector, and nimbly adjust supply chain, production, and market strategies.</li> <li>Give precedence to environmentally friendly production methods. Accelerate the implementation of energy-saving and carbon reduction initiatives, including the adoption of electrification and alternative fuels across all operating sites, so as to deliver carbon reduction while securing a dependable energy supply.</li> </ul>	<table border="1"> <thead> <tr> <th></th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>T4</td> <td>Low</td> <td>Medium</td> <td>Medium</td> </tr> </tbody> </table>		Short-term	Medium-term	Long-term	T4	Low	Medium	Medium
	Short-term	Medium-term	Long-term								
T4	Low	Medium	Medium								
<b>T5: Uncertainty in market signals</b>	<ul style="list-style-type: none"> <li>The evolution of metal recycling and the circular economy could decrease demand for primary minerals. As a supplier of primary mineral products, this CMOC may face fluctuations in product sales as a result.</li> </ul> <p><b>Energy transition metals (copper, cobalt, nickel, etc.)</b></p> <ul style="list-style-type: none"> <li>As the energy transition sector (which includes solar photovoltaics and electric vehicles) matures, growth in demand for raw materials is expected to moderate.</li> <li>Uncertainties about the prospects of battery technologies introduce risks of potential product substitution.</li> </ul> <p><b>Phosphate fertilizers</b></p> <ul style="list-style-type: none"> <li>The impact of extreme temperatures and frequent weather events on agriculture could lead to a decrease in demand for the phosphate fertilizers in CMOC Brazil.</li> </ul>	<ul style="list-style-type: none"> <li>Integrate climate-related factors, including resources, policies, and carbon emission limitations, thoroughly into the deliberations for the development and construction of new projects.</li> </ul>	<table border="1"> <thead> <tr> <th></th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>T5</td> <td>Medium</td> <td>High</td> <td>High</td> </tr> </tbody> </table>		Short-term	Medium-term	Long-term	T5	Medium	High	High
	Short-term	Medium-term	Long-term								
T5	Medium	High	High								
<b>T6: Increased costs of raw materials</b>	<ul style="list-style-type: none"> <li>Price volatility for the energy sources (electricity, natural gas, diesel, etc.) and materials (chemicals, sulfur, maintenance materials for facilities and equipment, etc.) required in CMOC’s operations could lead to an increase in costs.</li> </ul>	<ul style="list-style-type: none"> <li>Monitor price fluctuations for those resources essential for operations, such as energy and materials, and anticipate and proactively mitigate cost increases.</li> </ul>	<table border="1"> <thead> <tr> <th></th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>T6</td> <td>Low</td> <td>Medium</td> <td>Medium</td> </tr> </tbody> </table>		Short-term	Medium-term	Long-term	T6	Low	Medium	Medium
	Short-term	Medium-term	Long-term								
T6	Low	Medium	Medium								
<b>T7: Low-carbon transition pressures from supply chain partners</b>	<ul style="list-style-type: none"> <li>Supply chain demands on the lifecycle carbon footprint of products could result in increased management costs for CMOC.</li> </ul>	<ul style="list-style-type: none"> <li>Curb carbon emissions across product lifecycles, work with partners to promote a green industrial chain, and actively disclose relevant information such as the carbon footprint of our products to the public. All of the above can become CMOC’s competitive strengths.</li> </ul>	<table border="1"> <thead> <tr> <th></th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>T7</td> <td>Low</td> <td>Medium</td> <td>Medium</td> </tr> </tbody> </table>		Short-term	Medium-term	Long-term	T7	Low	Medium	Medium
	Short-term	Medium-term	Long-term								
T7	Low	Medium	Medium								

Risk impact:  Low  Medium  High

We identified T5: Uncertainty in market signals as having a greater medium- to long-term impact than other market risks, making it a key transition risk for CMOC. Given that this risk driver is supported by established databases and quantitative models, we selected it for financial impact modeling. The growth of metal recycling and circular technologies relative to the increasing demand for critical metals will influence the sales volume of mineral products in CMOC’s mining segment and, consequently, its revenue. To assess this impact, we prioritized copper, molybdenum, and cobalt, selecting them based on their revenue contribution within the mining segment and data availability from external sources. Revenue projections for these metals were derived from internal company estimates, while forecasts for the development of metal recycling and circular technologies and growth in demand for critical metals were based on IEA data.

According to modeling results, under the NZE scenario, market demand for critical metals is projected to outpace the advancement of metal recycling and circular technologies in the short to medium term (before 2040). This is primarily due to a global acceleration toward net-zero emissions, which will drive rapid expansion of the renewable energy market. This growth will extend upstream, triggering a surge in demand for critical metals, which is

expected to positively impact CMOC’s revenue. Under the NZE scenario, revenue is projected to be approximately 10% higher than in the STEPS scenario.

In the long term (2040–2050), as the global net-zero transition matures, the adoption of metal recycling and circular technologies is expected to expand, leading to partial substitution of primary minerals demand and a moderate decline in market demand for CMOC’s critical metals. However, this risk remains manageable, and by 2050, the projected revenue impact is expected to be no more than 0.5%.

Overall, we believe that the market transition risk driven by “uncertainty in market signals” will have a relatively limited financial impact on the company. While fluctuations in critical metal demand and the advancement of metal recycling and circular technologies may occur at different stages of the transition, CMOC’s strategic positioning in critical metals is expected to effectively mitigate potential financial risks associated with market signal uncertainty.

### Technology

Technological upgrades and innovation are key drivers for mining companies to reduce emissions along the value chain. During the low-carbon transition process, CMOC will face various technological challenges, requiring us to put more effort in assessing and managing risks. The technological challenges mainly include the increase in costs while adopting low-carbon technologies, the uncertainties and instabilities associate with rapid technological evolution, and the inability to keep up with the continuously evolving environmental regulations resulting from rapidly changing technological landscape.

Drivers	Strategic impacts	Mitigation measures	Impact assessment								
<p><b>T3: Cost of investments in low-carbon technologies</b></p>	<ul style="list-style-type: none"> <li>The opportunity for iterative improvements in CMOC's traditional mining and smelting processes is limited. The utilization of low-carbon technologies is confined to energy sources, logistics, and warehousing, leading to elevated investment costs for the replacement of equipment and facilities.</li> <li>In certain regions where our assets are located, such as the DRC, geographical constraints contribute to unreliable power supplies and limited energy alternatives. This increases the difficulty of transitioning to low-carbon technologies, resulting not only in increased costs but also investment risks.</li> </ul>	<ul style="list-style-type: none"> <li>Continuously monitor the development of low-carbon technologies and carefully evaluate their cost-effectiveness. Only adopt mature and economically viable technologies, so as to avoid dependence on potentially unstable innovations.</li> <li>Thoroughly assess the status of all assets and introduce targeted and cost-efficient technologies for reducing carbon emissions. This includes initiating renewable energy projects and implementing energy conservation and carbon reduction measures. Internally, in 2023, we outlined short-term carbon reduction projects (to be completed by 2030) and established implementation timelines for all operating sites.</li> </ul>	<table border="1"> <thead> <tr> <th></th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>T3</td> <td>Medium</td> <td>Medium</td> <td>Low</td> </tr> </tbody> </table>		Short-term	Medium-term	Long-term	T3	Medium	Medium	Low
	Short-term	Medium-term	Long-term								
T3	Medium	Medium	Low								

Risk impact:  Low  Medium  High

### Reputation

The expectations of stakeholders regarding corporate climate initiatives, transparency in information disclosure, and overall maturity continue to rise. If CMOC falls short of achieving its predetermined climate objectives within anticipated time frames or fails to align with leading climate initiatives, it may impact the trust of key stakeholders such as investors, customers, and talent. This could potentially lead stakeholders to collaborate with other entities that demonstrate a better climate performance. Hence, it is imperative to ensure that our climate targets and initiatives remain in line with societal expectations. Through prompt and transparent information disclosure, CMOC aims to underscore its leadership position and dedication in the realm of climate action, thereby safeguarding and bolstering our reputation.

Drivers	Strategic impacts	Mitigation measures	Impact assessment								
<p><b>T8: Increased concern and feedback from stakeholders</b></p>	<ul style="list-style-type: none"> <li>Interest in climate issues varies across stakeholders in the regions where CMOC's assets are situated. This may require the company to invest more time and resources in communication efforts to prevent the spread of misleading information and negative messaging.</li> <li>Failure to meet quantitative carbon emissions benchmarks required by stakeholders such as banks could lead to increased financing costs.</li> <li>The increasing frequency of extreme weather events may result in higher insurance premiums for CMOC's various operations.</li> <li>To ensure the timely achievement of publicly disclosed carbon reduction targets, there could be a rise in costs associated with adopting low-carbon technologies and equipment.</li> <li>A lack of effective climate risk management may impact CMOC's ability to attract and retain talent, thereby limiting the company's sustainable development.</li> </ul>	<ul style="list-style-type: none"> <li>Enhance communication with internal and external stakeholders by establishing diverse channels such as the official website, ESG reports, and TCFD reports. This will boost transparency and accuracy in information disclosure, fostering understanding and trust in CMOC's climate impact and actions.</li> <li>Actively participate in recognized ESG ratings to boost performance. Also consider initiatives such as issuing green bonds to project a positive image of environmental and social responsibility.</li> <li>Clearly outline carbon reduction plans for each operating site in line with CMOC's publicly stated carbon neutrality targets. Gradually transform the value chain to mitigate carbon emission risks.</li> <li>Promote internal awareness of climate issues at CMOC. Step up training and awareness campaigns to encourage widespread participation in carbon neutrality initiatives.</li> </ul>	<table border="1"> <thead> <tr> <th></th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>T8</td> <td>Medium</td> <td>Medium</td> <td>Low</td> </tr> </tbody> </table>		Short-term	Medium-term	Long-term	T8	Medium	Medium	Low
	Short-term	Medium-term	Long-term								
T8	Medium	Medium	Low								

Risk impact:  Low  Medium  High

Opportunities				
With the growing global demand for renewable energy and low-carbon technologies, CMOC is well-positioned to play a key role in areas like renewable energy and electric transportation. By actively supplying low-carbon and energy transition-related products and developing renewable energy projects, we not only advance our own sustainability efforts but also help lead the global climate transition. In doing so, we contribute to shaping a more environmentally sustainable industry landscape.				
Opportunity category	Drivers	Strategic impacts	Mitigation measures	Impact assessment
Energy source	O1: Undertake renewable energy projects	<ul style="list-style-type: none"> <li>In a context where the market and industry are actively transitioning to low-carbon practices, utilizing low-emission energy solutions, brings multiple benefits. This includes not only lower energy costs, but also a decreased sensitivity to carbon emission costs. Additionally, this approach may appeal to consumers and investors, thereby boosting market competitiveness.</li> </ul>	<ul style="list-style-type: none"> <li>Coordinate across operating sites to actively explore economically viable renewable energy solutions. This approach can further reduce carbon footprint of products, helping to maintain a competitive advantage.</li> </ul>	
Products and services	O2: Consumer trend toward low-carbon products and services	<ul style="list-style-type: none"> <li>CMOC has made critical metals, such as copper, cobalt, and nickel, a strategic focus, as these are key materials for various low-carbon projects. As market demand for low-carbon products and services increases, this could spur rapid development and construction in industries ranging from wind and solar power to new energy vehicles and ultra-high-voltage power grids. Such growth would require the extensive utilization of critical metals, which could drive the performance of our business.</li> <li>Additionally, CMOC's own operational carbon emissions will be subject to market evaluations of the company's low-carbon performance. If the company achieves above-average emission reductions, this will strengthen CMOC's image as a low-carbon enterprise, thereby enhancing market recognition of its products.</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen monitoring and forecasting for the renewable energy market and its associated, technological applications. Keep abreast of market trends and adapt product categories and production capacity flexibly based on evolving trends in relevant markets.</li> <li>Continuously enhance product quality while maintaining existing standards. Deliver higher-specification critical metals to meet the needs of cutting-edge renewable energy technologies.</li> <li>Proactively advance our Carbon Neutral Roadmap, reduce carbon emissions, and strengthen our reputation as a low-carbon industry leader.</li> </ul>	

Opportunity category	Drivers	Strategic impacts	Mitigation measures	Impact assessment
Resilience	O3: Energy substitution/diversification	<ul style="list-style-type: none"> <li>As extreme weather events intensify worldwide, the market is likely to experience energy shortages and heightened price volatility. By increasing the availability and integration of alternative energy sources, we can reduce the impact on production and operations, thereby enhancing resilience and stabilizing costs.</li> </ul>	<ul style="list-style-type: none"> <li>We actively pursue diversified renewable energy solutions tailored to the needs of each operating site. By leveraging digital systems to monitor and manage energy usage across our mining operations, we increase the overall resilience of our business against various uncertainties, ensuring cost and revenue stability. We have formulated a carbon neutral roadmap based on carbon emission forecasts for 2022–2050. Our commitment is to continuously strengthen climate resilience across different time frames. For detailed information, please refer to the CMOC Carbon Neutral Roadmap and Action Plan published on our official website.</li> </ul>	

Opportunity impact: Low Medium High

According to the above opportunity analysis, opportunities in the “Products and services” category are expected to have a medium impact in the short to medium term and a high impact in the long term, while opportunities in the “Resilience” category will have a medium impact in the short term and a high impact in the medium to long term. Given the significant impact of these two categories, we conducted a quantitative analysis to determine their financial impact on the company.

For “Products and services” opportunities, there are two key factors that will impact our revenue and the attractiveness of our products in the renewable energy market: the growth trajectory of the critical metals market, and our carbon emission intensity relative to the industry average. In order to quantify the impact of these factors, we made the following assumptions: 1) the growth trajectory of the critical metals market will be line with IEA forecasts; 2) the company's carbon emission intensity relative to the industry average will remain stable. According to our financial modelling, the rapid growth of the critical metals market and the company's lower carbon emission intensity relative to the industry average will positively impact revenue across all stages of the forecast period. By 2050, we expect these opportunities to contribute at least a 20% growth in mining revenue, highlighting both the significant commercial value of our strategic positioning in the critical metals market and the competitive advantage gained through our climate strategy.

For opportunities in the “Resilience” category, our research indicates that adopting alternative energy sources will result in additional operating costs and capital expenditure. In view of the clear commitment in our Carbon Neutral Roadmap to prioritize the expansion of solar power, as well as the availability of extensive and reliable data on solar power generation, we conducted a quantitative analysis to assess the financial impact of replacing existing electricity sources (including purchased industrial electricity and diesel power generation) with solar power. The analysis was conducted using data from the following sources: IEA– used to calculate operating costs for solar power generation and forecast diesel prices; NGFS– used to project the price of purchased industrial electricity and estimate capital expenditures for solar power generation; Authoritative third-party institutions– used to obtain price forecasts for green electricity and green certificates; Internal company forecasts– used to project solar power generation, diesel power generation, and green electricity/green certificate procurement.

According to our financial modelling, the adoption of solar power will reduce energy operating costs in both climate scenarios, as the total cost of purchased industrial electricity, diesel power generation, and green power/green certificate procurement exceeds the operating costs of solar power generation. These savings are expected to grow as solar power accounts for an increasing share of our energy mix over the coming decades. By 2050, we estimate that annual operating cost savings will be equivalent to at least 5% of mining revenue. Furthermore, while the expansion of solar power will require additional capital expenditure, we do not expect this to exceed 0.4% of mining revenue. Overall, we expect “Resilience” opportunities to generate significant long-term benefits, primarily driven by long-term cost advantages from the large-scale deployment of solar power.

## 2.2.2 Physical risks

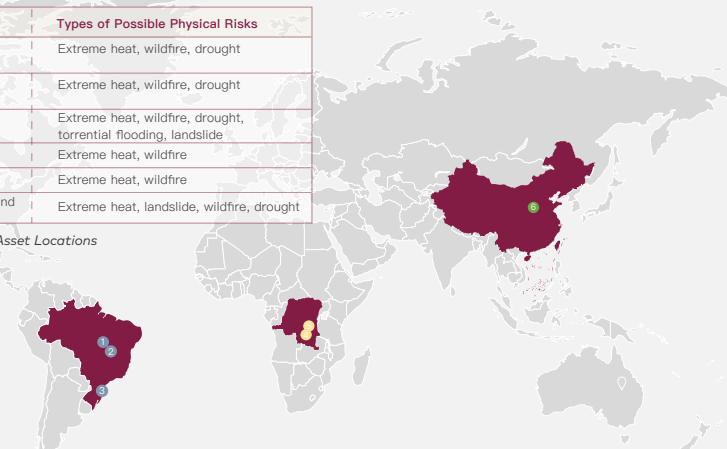
As global climate change intensifies, occurrences such as extreme heat, floods, droughts, and wildfires pose potential risks to CMOC. These include damage to equipment and facilities, production interruptions, supply chain disruption, and even adverse effects on employee safety and community relations. Identifying, evaluating, and managing the potential physical risks specific to each mining site is a top priority in CMOC’s climate risk management strategy.

### Mining Business: Physical Risk Identification and Assessment

In January 2025, the company conducted a comprehensive assessment of physical risks for our six major mining assets situated in China, Brazil, and the DRC.

Asset Name	Types of Possible Physical Risks
Boa Vista Mine (MBV) Niobium Plant (PNB)	Extreme heat, wildfire, drought
Phosphates Catalão (PCT) Phosphates Ovidor (POV)	Extreme heat, wildfire, drought
Phosphates Cubatão (PCB)	Extreme heat, wildfire, drought, torrential flooding, landslide
KFM	Extreme heat, wildfire
TFM	Extreme heat, wildfire
Sandaozhuang Molybdenum and Tungsten Mine	Extreme heat, landslide, wildfire, drought

Physical Risk Assessment - Key Asset Locations



For our physical risk assessment, we employed ten key parameters, encompassing extreme heat, drought, storm surge, river flood, rainfall flood, typhoons, landslides, wildfires, snowmelt, and sea level rise. The table below provides details on the parameters and detailed metrics used in the assessment:

Scenario Parameters - Physical Risks

Parameter	Metric	Data source
Acute	River flood	Water depth (m) GPM, TRMM, CMIP5/6, CCSM4, Hadgem2, Microwave Satellite Datasets, etc.
	Storm surge	Water depth (m) Meteorological Center Datasets, MERIT DEM, etc.
	Rainfall flood	Water depth (m) GPM, TRMM, CFSR
	Typhoon	Wind speed (km/h) IBTrACS, CMIP, CMIP5/6
	Landslide	Annual landslide frequency (times/yr.) NOAA, GPM, CMIP5/6, MODIS Slope etc.
	Wildfire	Fire Weather Index (FWI) AR5, AR6
	Extreme heat	Temperature (°C) CHESLA, MEERA, CMIP5/6 etc.
Chronic	Drought	Standardized Precipitation Index (SPI) GPM, TRMM, CFSR
	Snowmelt	Snowmelt quantity 10 <sup>-6</sup> (Kg·m) AR5, AR6
	Sea level rise	Sea level rise (m) GCM (IPCC), MERIT DEM

Using 2020 as the base year, we performed simulations to estimate the physical risk exposure of our mining assets in the medium to long term, under both the high emissions scenario (SSP5–8.5) and low emissions scenario (SSP1–2.6). We then applied asset value weightings to each of our mining assets to assess the Group’s overall exposure to physical risks.

The table below illustrates the physical risks identified for CMOC’s mining assets across different scenarios and time frames, including their business impact:

CMOC Group-Level Physical Risk Register

Risk type	Details	2020	2030		2050		
		Baseline	SSP1–2.6	SSP5–8.5	SSP1–2.6	SSP5–8.5	
Physical risks	Acute	River flood	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Storm surge	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Rainfall flood	Low	Low	Low	Low	Low
		Typhoon	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Landslide	Low	Low	Low	Low	Low
		Wildfire	Medium	Medium	Medium	Medium	Medium
		Extreme heat	Medium	Medium	Medium	Medium	Medium
Chronic		Drought <sup>1</sup>	Low	Low	Low	Low	Low
		Snowmelt	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Sea level rise	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low

Risk impact: ■ Extremely low ■ Low ■ Medium ■ High ■ Extremely high

<sup>1</sup>The impact severity of drought risk has been updated this year, reflecting changes in relevant parameters due to model version upgrades.



Distribution of Major Physical Risks by Country

Risk type	2020	2030		2050	
	Baseline	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5
Rainfall flood	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China
Landslide	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China
Wildfire	•DRC	•DRC	•DRC	•DRC	•DRC
	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China
Extreme heat	•DRC	•DRC	•DRC	•DRC	•DRC
	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China
Drought	•DRC	•DRC	•DRC	•DRC	•DRC
	•Brazil	•Brazil	•Brazil	•Brazil	•Brazil
	•China	•China	•China	•China	•China

Risk impact: ■ Extremely low ■ Low ■ Medium ■ High ■ Extremely high

Risk type	Trend analysis	Risk impact
<ul style="list-style-type: none"> <li>• Rainfall flood</li> <li>• Landslides</li> </ul>	<p>Due to local topography, some of CMOC's mining sites in Brazil and China currently face low risks from Rainfall flood (specifically our Cubatão chemical plant in Brazil and the Sandaozhuang Molybdenum and Tungsten mine in China) and landslides (specifically our Cubatão chemical plant in Brazil and the Sandaozhuang Molybdenum and Tungsten mine in China). Based on the calculations in our model, the anticipated impact of these risks is expected to rise in the medium to long term, especially under high-emission scenarios. However, it consistently remains within the low-risk category.</p>	<p>If Rainfall flood or landslides occur, they could have diverse consequences for our production operations and local communities, such as:</p> <ul style="list-style-type: none"> <li>•Endangering the health and safety of employees and local residents</li> <li>•Causing damage to facilities and equipment</li> <li>•Escalating management costs for tasks like facility maintenance, wastewater treatment, and landslide monitoring</li> <li>•Operational interruptions.</li> </ul>
<ul style="list-style-type: none"> <li>• Wildfire</li> <li>• Extreme heat</li> </ul>	<p>Currently the main physical risks faced by CMOC are related to extreme heat and wildfires and we expect that these will persist in the future. The anticipated impact of these risks is expected to rise in the medium to long term, particularly under high-emission scenarios. Nevertheless, the overall risk level consistently remains within the medium range.</p>	<p>The escalating frequency and severity of extreme weather events, such as global heatwaves, and associated disasters like wildfires, could pose diverse threats to our operations, including:</p> <ul style="list-style-type: none"> <li>•Endangering the health and safety of employees and local residents</li> <li>•Causing damage to facilities and equipment</li> <li>•Escalating management costs for tasks like facility maintenance and firefighting management</li> <li>•Operational interruptions.</li> </ul>
<ul style="list-style-type: none"> <li>• Drought</li> </ul>	<p>At present, mines in the DRC, Brazil and China are all exposed to drought risk. Based on the calculations in our model, the risk level will consistently remain low in the medium to long term.</p>	<p>As a mining company, we rely heavily on resources such as water and electricity. Diminishing rainfall caused by worsening global drought conditions may present considerable challenges for both our production processes and community relations, including:</p> <ul style="list-style-type: none"> <li>•Increases in community conflict</li> <li>•Aggravation of fugitive road dust</li> <li>•Scarcity of process water</li> <li>•Power shortages and higher electricity prices</li> <li>•Operational interruptions.</li> </ul>

Taking into account the evaluation outcomes for physical risks across our operating sites, we anticipate that global warming will have a growing impact on CMOC's operations, presenting ever greater challenges to our business and assets. The distinct trends observed for each operating site under various time frames and climate scenarios underscore the importance of proactive adaptation to evolving climate patterns, so as to safeguard the sustainability of our business.

In response to the current physical risks, CMOC has already established comprehensive measures for risk management and mitigation. The company will continue to enhance its risk prevention capabilities in response to projected trends. Given the substantial differences in climatic and natural conditions across sites where our assets are located, the following sections will elaborate on the primary physical risks faced by each site and the corresponding measures taken to mitigate them.

### DRC

Physical Risk Register for KFM in the DRC

Risk type – KFM	Risk	2020	2030		2050		
		Baseline	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5	
Physical risks	Acute	River flood	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Storm surge	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Rainfall flood	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Typhoon	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Landslide	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Wildfire	Medium	Medium	Medium	Medium	Medium
	Chronic	Extreme heat	Medium	Medium	Medium	Medium	Medium
		Drought	Low	Low	Low	Low	Low
		Snowmelt	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Sea level rise	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low

Risk impact: ■ Extremely low ■ Low ■ Medium ■ High ■ Extremely high

Physical Risk Register for TFM in the DRC

Risk type – TFM	Risk	2020	2030		2050		
		Baseline	SSP1–2.6	SSP5–8.5	SSP1–2.6	SSP5–8.5	
Physical risks	Acute	River flood	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Storm surge	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Rainfall flood	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Typhoon	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Landslide	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Wildfire	Medium	Medium	Medium	Medium	Medium
		Extreme heat	Medium	Medium	Medium	Medium	Medium
Chronic	Drought	Low	Low	Low	Low	Low	
	Snowmelt	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low	
	Sea level rise	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low	

Brazil

Physical Risk Register for Operations in Brazil

Risk type – Brazil	Risk	2020	2030		2050		
		Baseline	SSP1–2.6	SSP5–8.5	SSP1–2.6	SSP5–8.5	
Physical risks	Acute	River flood	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Storm surge	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Rainfall flood	Low	Low	Low	Low	Low
		Typhoon	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Landslide	Low	Low	Low	Low	Low
		Wildfire	Low	Low	Medium	Low	Medium
		Extreme heat	Medium	Medium	Medium	Medium	Medium
Chronic	Drought	Low	Low	Low	Low	Low	
	Snowmelt	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low	
	Sea level rise	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low	

**Risk impact:** ■ Extremely low ■ Low ■ Medium ■ High ■ Extremely high

**Risk impact:** ■ Extremely low ■ Low ■ Medium ■ High ■ Extremely high

Our risk assessment for the DRC encompassed the TFM and KFM sites. The results showed that assets at both sites faced similar material physical risks and impact levels. The climate in the DRC is generally favorable and stable and the likelihood of extreme weather events is relatively low. However, changes in rainfall patterns due to climate change still pose a potential drought risk. While the impact of drought is relatively low in the medium to long term, the prolonged dry season exposes both mines to medium-risk levels, including wildfires and extreme heat. To effectively mitigate the impact of these physical risks and enhance resilience, the TFM and KFM sites have implemented various response measures. Both sites have utilized dust suppressants and water spraying to address dust issues during the dry season, minimizing the impact on road transport. Steps have also been taken to increase water recycling and conservation, and water storage facilities have been constructed to relieve stress on water resources during the dry season. At the same time, advances in open-pit mine and tailings storage designs, the reinforcement of emergency plans and drills, and a heightened focus on routine monitoring and inspections all work together to bolster the overall readiness of our operating sites to respond to climate-related emergencies.

We divided CMOC’s operating sites in Brazil into three groups by geographical location, and applied asset value weightings to each: 1) Boa Vista Mine (MBV) and Niobium Plant (PNB); 2) Phosphates Catalão (PCT) and Phosphates Ovidor (POV); and 3) Phosphates Cubatão (PCB). According to the assessment, the main physical risks faced by our operating sites in Brazil include extreme heat, drought, and wildfires. Additionally, the PCB plant faces a relatively low risk of rainfall flood and landslides. To address water scarcity caused by drought, we are actively advancing initiatives to enhance water recycling, construct water storage facilities, and assist local communities in maintaining springs to supplement groundwater. Furthermore, given Brazil’s reliance on hydropower, drought can result in electricity supply shortages and price hikes. To mitigate these issues, we are accelerating energy substitution and diversification efforts to alleviate power supply concerns. Additionally, we have entered into long-term electricity price agreements with local governments to mitigate price volatility.

Under the high-emission scenario, the long-term impact of wildfires could escalate from low to medium risk. To mitigate this, CMOC Brasil strengthened monitoring protocols at its operating sites and nearby forests. Satellite systems are now used to deliver real-time monitoring and alerts to ensure timely and effective responses to fire threats.

China

Physical Risk Register for the Sandaozhuang Molybdenum and Tungsten Mine in China

Risk type – Sandaozhuang	Risk	2020 Baseline	2030		2050		
			SSP1–2.6	SSP5–8.5	SSP1–2.6	SSP5–8.5	
Physical risks	Acute	River flood	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Storm surge	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Rainfall flood	Low	Low	Low	Low	Low
		Typhoon	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Landslide	Low	Low	Low	Low	Low
	Chronic	Wildfire	Low	Low	Low	Low	Low
		Extreme heat	Medium	Medium	Medium	Medium	Medium
		Drought	Low	Low	Low	Low	Low
		Snowmelt	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low
		Sea level rise	Extremely low	Extremely low	Extremely low	Extremely low	Extremely low

Risk impact: ■ Extremely low ■ Low ■ Medium ■ High ■ Extremely high

The main physical risks faced by the Sandaozhuang Molybdenum and Tungsten Mine in China include rainfall flood, landslides, wildfires, drought (low risk), and extreme heat (medium risk). In light of water stress caused by drought and local water demand, we have taken steps to reduce fresh water usage, including by increasing the water recycling rate and monitoring water resources. With concern to landslide risks in the mining area, we have reinforced and upgraded open-pit slopes and tailings storage facilities to meet higher standards. We regularly revise emergency plans, conduct emergency drills, and continuously enhance the monitoring and inspection of relevant metrics to ensure the safety and regularity of operations. We have also deployed unmanned systems to minimize the impact of extreme heat on manual operations. To effectively reduce the potential risks associated with rainfall flood, we have designed its drainage system in line with international best practices. Additionally, it has developed a multi-layered risk prevention system for rainfall flood, which includes regular upgrades to flood control facilities, intelligent monitoring, and a special inspection mechanism during the rainy season.

Mining Business: Financial Modelling of Physical Risk Impacts

Given data availability constraints, we conducted financial quantification assessments for selected physical risks. The analysis model incorporates defined input parameters and model-specific variables. User-defined inputs include asset geographical coordinates (latitude/longitude), total floor area, and asset valuation data, while the model inherently integrates physical risk exposure metrics and structural vulnerability indices. The model did not account for insurance coverage and quantified the aggregate climate value at risk (CVaR) from all physical risks.

CVaR quantifies the aggregate financial exposure at a given location, encompassing both asset losses and operational losses. Asset losses include the cost of assets replacement and depreciation in asset value, while operational losses reflect increased operating costs due to extreme weather events and losses resulting from operational disruptions. The results of our financial impact modelling are shown in the chart below.



According to our modelling results, under the SSP1–2.6 climate scenario, CVaR is projected to remain below 3.27% of mining revenue in the short to long term. Even under the SSP5–8.5 scenario, CVaR is forecast to peak at 6.23% of mining revenue. While current assessments fall within manageable thresholds, proactive monitoring is warranted given the material escalation of physical risks under elevated emission scenarios. To align operations with low-emission scenario and mitigate physical risks, we will rigorously implement our carbon neutral roadmap and continuously strengthen our climate resilience and adaptability.

## Trading Business: Physical Risk Identification and Assessment

CMOC recognizes that climate change not only impacts our mining business, but also poses potential risks to upstream and downstream segments along the value chain. Therefore, in addition to assessing physical risks to our fixed mining assets, we have conducted physical risk assessments for our trading business IXM and developed appropriate mitigation measures.

Based on historical records of extreme weather events at some ports where our inventory is stored, in 2025 we conducted further physical risk identification and assessments at two warehouses with higher exposure potential, using the same metrics, databases, and climate scenarios as those used to assess our mining assets. The assessment found that extreme temperatures, storm surges, and sea level rise are expected to have a medium to high impact on both ports. For example, extreme temperatures could increase maintenance costs for warehouse equipment and infrastructure, leading to higher operating costs. Storm surges, which are typically accompanied by strong winds and high waves, could damage inventory and reduce its value, while rising sea levels could damage storage facilities and affect storage conditions.

We also identified and analyzed physical risks that may affect our logistics and transportation operations. Key risks include typhoons, torrential rain, and flooding.

To reduce physical risks to IXM inventory in transit and storage, we have put in place measures such as physical inspection of third-party warehouses in order to identify exposure to various risks including natural hazards. For warehouses owned and controlled by IXM, emergency contingency plans are also implemented and reviewed annually to safeguard physical integrity of our staff and property. To further mitigate financial impact arising out of physical risks that cannot be eliminated, IXM procures insurance coverage against physical damage or loss to IXM inventory in storage and transit, as well as its fixed assets globally.

Our climate scenario analysis and systematic risk assessments highlight both the challenges posed by extreme weather and the opportunities presented by a low-carbon future. At CMOC, we recognize the importance and urgency of strengthening the climate resilience of our operations and business strategy. By conducting rigorous assessments of climate risks and opportunities, we will continue to improve our climate change mitigation and adaptation mechanisms, seize new growth opportunities arising from the transition to a low-carbon economy, and contribute to global climate action and sustainable development, placing sustainability at the core of our growth strategy.

## 3 Risk Management

CMOC incorporates climate-related risk management into the Group's comprehensive risk management processes. This includes conducting climate risk identification, assessment, and management every six months. This process helps us to identify significant climate-related risks and opportunities for the company, as well as their potential scale and scope. Our goal is to better understand climate-related impacts and incorporate them into strategic business considerations. This enables us to timely develop and implement effective risk response measures to enhance climate resilience and seize climate opportunities.

## 3.1 Climate-related risk identification and assessment process

### Climate-related risk identification

We employ a methodical approach involving systematic research and cross-departmental collaboration to pinpoint climate risks. Key steps include:

- Engaging external experts to conduct industry-level risk reviews and performing desktop investigations into climate policies and regulations specific to the countries/regions of operation.
- Facilitating discussions with management personnel from Group functional departments and subsidiaries to gain valuable insights. At the Group level, this encompasses the ESG, Board Office, Internal Control and Audit, Commodity and Marketing, Project Development, Business Development, Production and Technology, Finance, Treasury, Global Supply Chain, and IT departments. At the subsidiary level, this includes IXM, our Chinese and Brazilian operations, and the TFM and KFM mines.
- Reviewing NGFS Phase 4 climate scenario data and IEA WEO 2023 climate scenario data to assist in identifying and evaluating transition risks.
- Reviewing the IPCC Atlas database to aid in the identification and evaluation of physical risks.

This integrated risk identification process, combining both internal and external elements, ensures a comprehensive understanding of various climate risks for CMOC. We consider factors from diverse functional areas and operational aspects, while consulting the latest information from globally recognized databases, resulting in the creation of a list of climate-related risks for prioritization.

### Climate-related risk assessment and prioritization

To better understand the relative importance of climate risks, we conduct comprehensive assessments of identified climate risks. Utilizing criteria such as likelihood, impact, adaptability, and recovery, we score and prioritize each type of climate risk in two scenarios and across different time frames. Chaired by the Vice President in charge of ESG, the ESG Department coordinates the scoring process, which involves management from key functional departments and operating units. This collaborative effort ensures the objectivity and comprehensiveness of the assessment results, while building internal consensus on the primary climate risks to the business. Such consensus serves as the foundation for the effective implementation of climate risk response strategies.

The results of climate risk prioritization are submitted to the Board for review. In addition, the Board annually formulates climate risk management-related strategies, policies, and mechanisms based on the assessment results. These are communicated to the management, with the ESG Department responsible for formulating and implementing specific response measures, and overseeing and tracking the progress of established objectives.

### 3.2 Climate-related risk and opportunity management practices

Within our existing comprehensive risk management framework, we have defined climate change risks as a specific subset of ESG risks. These are comprehensively assessed and controlled alongside other major strategic risks, such as corporate governance and business transformation. By covering the entire Group’s risk register and reporting system, we identify and measure the relative importance of climate risks relative to other risks. This approach enables us to formulate targeted response strategies based on the urgency and severity of climate risks, ensuring the timely and effective implementation of relevant control measures.

Risk register	<ul style="list-style-type: none"> <li>In 2023, we formally included “Climate Change Risks” as a subcategory in the risk register for both the headquarters and operating sites. This was done to gain a comprehensive perspective on the operational significance of climate-related risks and measures implemented. It explicitly incorporates climate risk management into operational management processes.</li> <li>Group-level functional departments and subsidiaries conduct semi-annual reviews of the risk register, during which they update risk levels, along with corresponding action plans and procedures.</li> <li>The Group’s risk register is compiled and updated by the Internal Control and Audit Department and reported annually to the Group CEO and the Audit and Risk Committee of the Board.</li> </ul>
Reporting system	<ul style="list-style-type: none"> <li>In their monthly reports to the Group’s senior management, each operating unit includes detailed information on significant ESG-related issues based on their specific circumstances.</li> <li>Quarterly reporting materials from management to the board also encompass ESG-related issues.</li> </ul>

## 4 Metrics and Targets

In 2023, we developed a carbon neutral roadmap. This defines strategic targets and specific action plans for peaking carbon emissions by 2030 and achieving carbon neutrality by 2050. The roadmap is consistent with the IEA’s NZE scenario; meets the progressive requirements of the Paris Agreement to limit global warming to 1.5 °C above pre-industrial levels; and encompasses short-term emission reduction targets, medium and long-term planning, as well as the company’s investment commitments toward achieving carbon neutrality. With the carbon neutrality roadmap at the forefront of its strategy, CMOC is committed to driving comprehensive emission reduction initiatives across the Group so as to strengthen operational resilience and climate adaptation capacity. For more information on the carbon neutrality roadmap, please refer to the CMOC Carbon Neutral Roadmap and Action Plan, which is published on our website.

Selecting appropriate metrics and targets is crucial for CMOC when it comes to gauging and managing climate-related risks and opportunities. As we deepen our efforts to disclose climate-related information, we will progressively incorporate additional metrics and targets beyond those related to greenhouse gas emissions, water usage, and energy consumption. This expansion will involve incorporating metrics and targets related to our products or finances. We will consistently monitor progress and enhance transparency in disclosure, providing a more comprehensive representation of the company’s performance in addressing climate-related challenges and opportunities.

Key Climate-Related Metrics and Targets for CMOC

Category	Metric	Target
Greenhouse gas emissions	<ul style="list-style-type: none"> <li>Total greenhouse gas emissions (scope 1 &amp; scope 2) (kilotonnes)</li> <li>Greenhouse gas emission intensity (scope 1 &amp; scope 2) (tonnes per tonne of processed ore)</li> <li>Direct greenhouse gas emissions (scope 1)</li> <li>Indirect greenhouse gas emissions (scope 2)</li> </ul>	<ul style="list-style-type: none"> <li>Short-term target (by 2030): Achieve a 15% reduction in carbon intensity, so as to reach peak carbon emissions by 2030.</li> <li>Medium-term goal (2030–2040): Achieve a 38% reduction in peak carbon emissions by 2040 on 2030 levels.</li> <li>Long-term goal (2041–2050): Achieve a 67% reduction in carbon emissions by 2045 on 2030 levels, and achieve carbon neutrality by 2050.</li> </ul>
Energy	<ul style="list-style-type: none"> <li>Total energy consumption (MWh)</li> <li>Energy intensity (MWh/tonne of processed ore)</li> <li>Share of renewable energy</li> </ul>	<ul style="list-style-type: none"> <li>The share of renewables should be at least 40% by 2025.</li> </ul>
Water	<ul style="list-style-type: none"> <li>Total water use (million cubic meters)</li> <li>Water use intensity (cubic meters per tonne of processed ore)</li> </ul>	<ul style="list-style-type: none"> <li>The share of recycled water should be at least 83% by 2025.</li> </ul>
Waste	<ul style="list-style-type: none"> <li>Total hazardous waste emissions (kilotonnes)</li> <li>Intensity of hazardous waste emissions (tonnes per tonne of processed ore)</li> <li>Total non-hazardous waste emissions (kilotonnes)</li> <li>Intensity of non-hazardous waste emissions (tonnes per tonne of processed ore)</li> </ul>	<ul style="list-style-type: none"> <li>Continuously improve waste recycling rates, reduce environmental impact, and promote the circular economy.</li> </ul>

This ESG report provides detailed disclosure on selected climate-related key metrics and targets, including their definitions and calculation methods. For more information, please refer to the Environment and Data Overview chapters of the report.

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