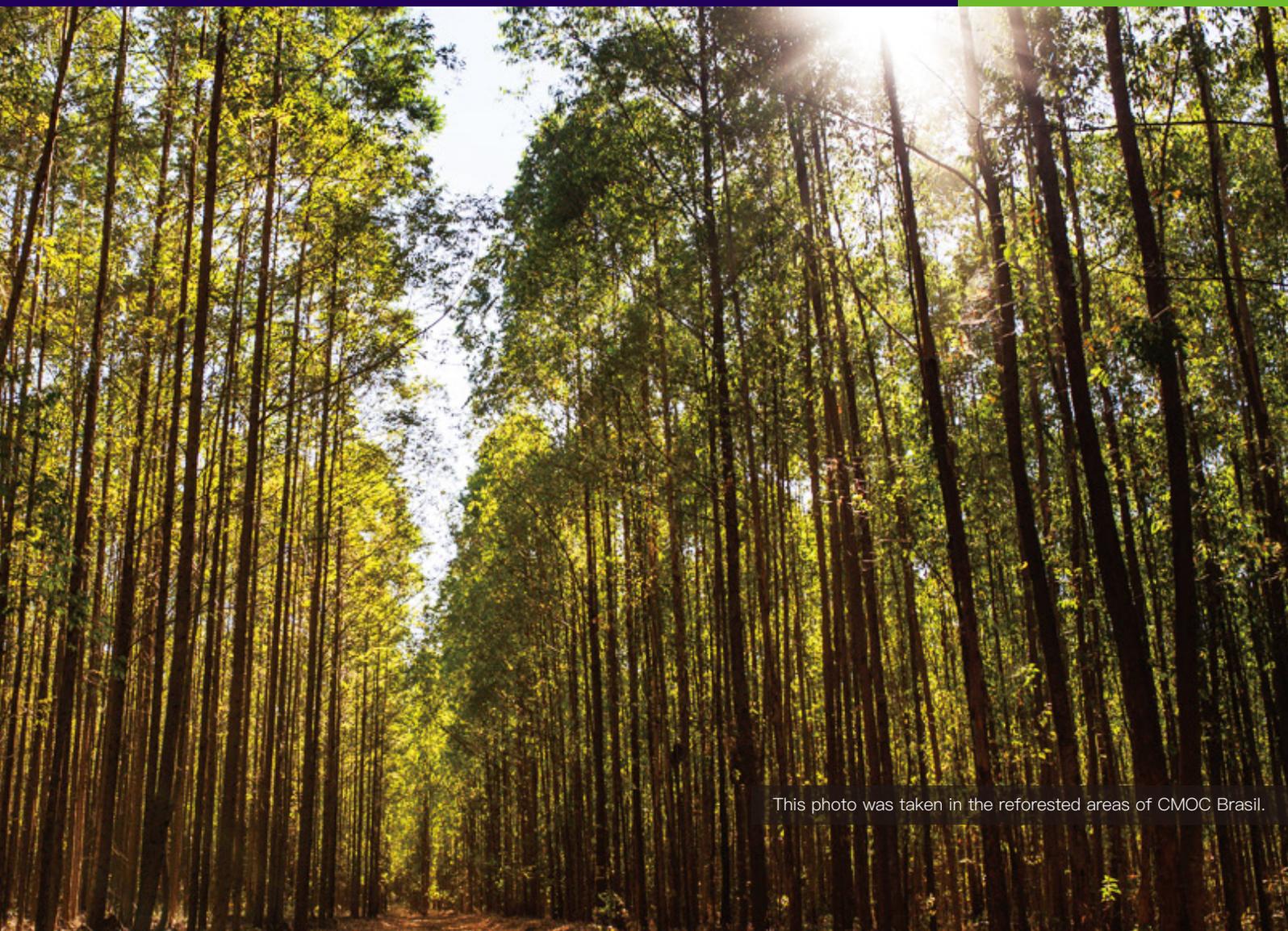


2020

Environmental Social and Governance Report

China Molybdenum Co., Ltd.



This photo was taken in the reforested areas of CMOC Brasil.

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About this Report

01

The *Environmental, Social and Governance Report* (hereinafter “this report” or “ESG report”) provides an account of the performance of China Molybdenum Co., Ltd. (hereinafter “CMOC”, “we”, or “the company”) in terms of fulfilling environmental, social, and governance responsibilities in 2020. For more information about the company, please refer to the 2020 Annual Report issued by the company on the Shanghai Stock Exchange (SSE) and the Hong Kong Stock Exchange and Clearing Limited (HKEX).

The 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 come from CMOC’s official documents and statistical reports, as well as summaries and statistics provided by its affiliates. IXM, which was fully acquired by the company in July 2019, is included in this year’s report. The Kisanfu copper-cobalt mine in the Democratic Republic of the Congo (DRC), which was acquired by the company on December 13, 2020, is not included in this report.

Data and information in this report reflect the reporting period from January 1, 2020 to December 31, 2020. Additional information that is relevant to the subject matter of this report and derived from events in 2021 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. Please note that as a result of methodology changes or corrections, data from previous years may have been updated. We encourage users of this report to contact our sustainability department for inquiries (603993@cmoc.com). This report can be downloaded from the official websites of the company (www.cmoc.com), Shanghai Stock Exchange (www.sse.com.cn), or HKEX (www.hkexnews.hk).

The boundaries of this ESG report represent a snapshot in the evolution of our company and its sustainability governance structure. In 2018, CMOC formulated a roadmap for a sustainability governance system and a Strategic and Sustainability Committee at the Board level. In 2019, CMOC established the Sustainability Executive Committee at the executive level; it also reviewed and updated nine compliance and sustainability policies applicable to the whole group, 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*, and *Health, Safety, and Environmental Policy*. In 2020, CMOC furthered the implementation of the aforementioned policies across all business segments and continued to improve its compliance and sustainability framework. It also started the update of its *Human Rights Policy* and the development of an *Anti-Money Laundering Policy* and *Data Protection 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 2019, this year’s external assurance covers all three international mining sites (namely Tenke Fungurume Mining in the Democratic Republic of the Congo, CMOC Brasil in Brazil, and Northparkes in Australia). Chinese mining operations and IXM are not covered in the scope of the assurance.

As of 2020, CMOC received an MSCI ESG Rating of BBB¹.

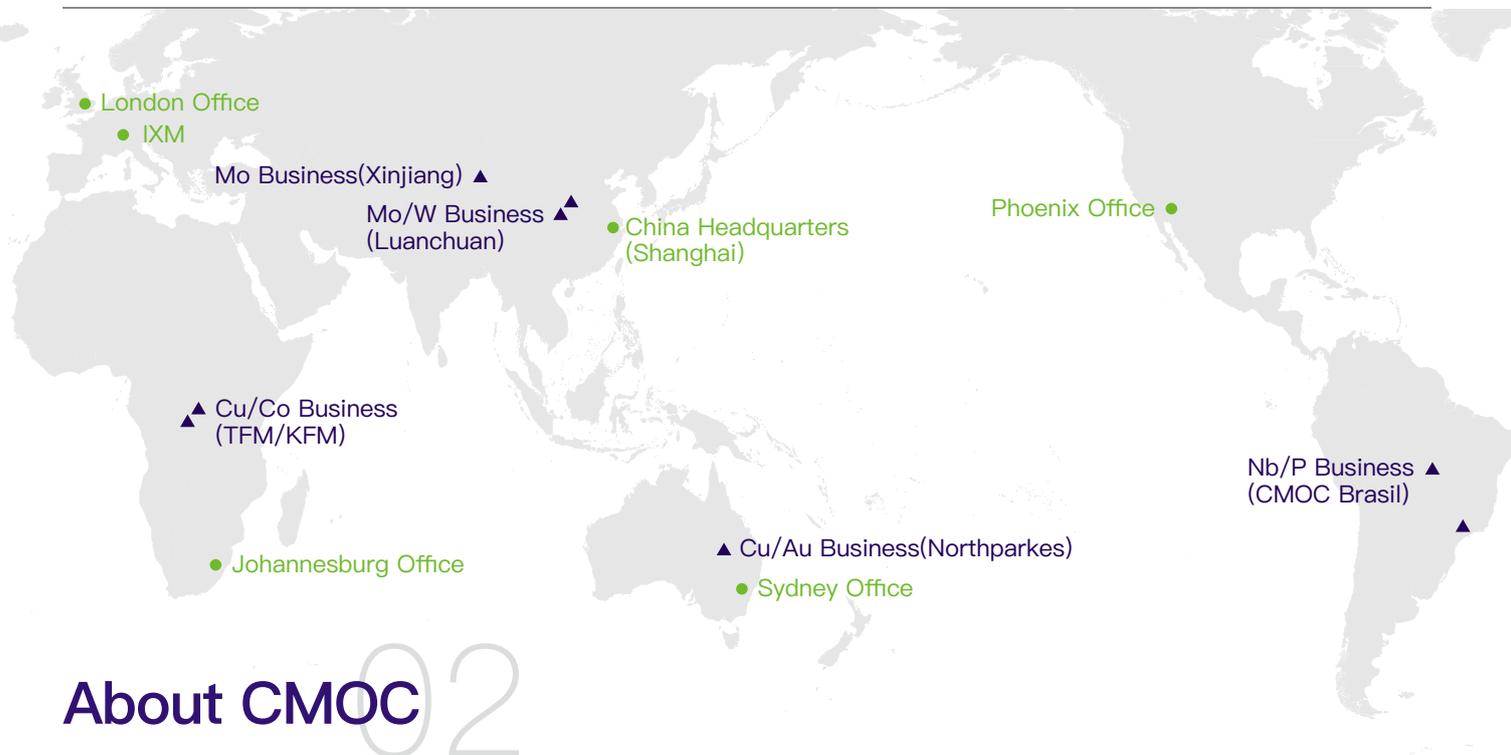


Global Reporting Initiative (GRI)

As in 2019, 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 (core) framework. The GRI disclosures were reported according to a harmonized data reporting process that included all business operations. Some disclosures common to the HKEX Reporting Guide and GRI Standards come from the document *Linking the GRI Standards and HKEX ESG Reporting Guide*. 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 22 March, 2021, 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.



About CMOC 2

Headquartered in the People's Republic of China, CMOC is an international mineral resources company engaged in exploring, mining, processing, refining, marketing, and trading mineral products. The company's main assets and operations are located in Asia, Africa, South America, Oceania, and Europe. CMOC is one of the world's largest tungsten producers, the second-largest cobalt and niobium producer, a top-seven molybdenum producer, and a leading copper producer. It is also the second-largest producer of phosphatic fertilizers in Brazil and the world's third-largest non-ferrous metals merchant. It is listed on the Shanghai Stock Exchange (SHA: 603993) and the Hong Kong Stock Exchange (HKEX: 03993).

CMOC's vision is to become a most respected world-class modern resources company. The company's corporate philosophy values meritocracy, cost control, continuous improvement, and shared success. Its development strategy aims to consolidate existing cost advantages, continuously manage and optimize the balance sheet, build synergies while ensuring stable domestic and overseas operations, continue acquiring, developing, and investing in resources projects, and continuously improve its corporate governance and promote socially and environmentally responsible business model that enables value creation, structural adjustment, and a transition to new growth engines.

As of December 31, 2020, the company's main mining assets were located in the Democratic Republic of the Congo (DRC), China, Brazil, and Australia, and its metal trading business spanned 62 countries.

Tenke Fungurume Mining (TFM), located in the Democratic Republic of the Congo. CMOC holds 80% equity in TFM, which engages in exploring, mining, processing, refining, and selling copper and cobalt in a mining concession that covers over 1,500 sq. km. The concession's main products are copper cathode and cobalt hydroxide. TFM operates a large, high-grade copper deposit that is also home to one of the largest, high-grade cobalt deposits in the world. In addition, in December 2020, CMOC acquired the Kisanfu copper-cobalt mine, which is also located in the Democratic Republic of the Congo (DRC). The Kisanfu mine is one of the world's largest, highest-grade undeveloped cobalt and copper projects. Located just 33 km southwest of TFM, it is expected that the Kisanfu mine will create significant synergies.

Sandaozhuang molybdenum-tungsten mine and Shangfanggou molybdenum mine, located in China. CMOC has the highest ferro-molybdenum and molybdenum oxide production capacity in China. The Sandaozhuang molybdenum-tungsten mine is wholly owned and operated by CMOC. The mine has 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, has operated stably since production resumed in Q3 2019, delivering a sharp increase in ore output. The mine also contains rich deposits of iron ore, which is efficiently recovered, giving the mine an additional resource advantage.

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

Northparkes Copper and Gold Mine ("NPM") in Australia. The company also holds 80% equity in NPM, which utilizes an advanced, fully automated block cave mining method to produce copper concentrate, and gold and silver as by-products.

IXM, headquartered in Switzerland. The company holds 100% equity in IXM. IXM is a global merchant in base and precious metals. Operating in over 62 countries, IXM specializes in the merchandising of copper, zinc, lead, and precious metal concentrates as well as refined copper, zinc, aluminum, cobalt, nickel and niobium.

Production data for each business segment is provided below, and can also be found in the CMOC annual report, which also contains the company's consolidated financial statements.

Product	Production volume	IXM metal trade	Trade volume
Copper metal, TFM (tonnes)	182,597	Concentrates (10 000 tonnes)	274
Copper metal, NPM (based on 80% equity interest) (tonnes)	26,997	Refined metals (10 000 tonnes)	260
Molybdenum metal (tonnes)	13,780		
Tungsten metal (tonnes)	8,680		
Cobalt metal (tonnes)	15,436		
Niobium metal (tonnes)	9,300		
Phosphate fertilizers (HA+LA) (10 000 tonnes)	109		
Gold, NPM (based on 80% equity interest) (ounces)	20,897		

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

For the year ended December 31, 2020 (million RMB)	China	Africa	Brazil	Australia	IXM	Other countries	Total
Payment to suppliers	6,770.4	3,476.7	2,550.3	659.1	92,828.8	183.8	106,469
Employee wages and benefits	656.4	666.7	262.8	145.0	395.0	53.1	2,179
Payment to providers of capital	1,313.0	43.2	119.8	28.6	411.0	-	1,916
Dividends	928.8	43.2	-	-	-	-	972
Interest	384.3	-	119.8	28.6	411.0	-	944
(Refunds from) payments to governments	671.6	1,994.7	360.0	53.8	134.3	5.2	3,220
Community investments	24.3	122.4	8.6	1.1	-	-	156
Direct economic contributions	9,436	6,304	3,302	888	93,769	242	113,940

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 10,956 employees and 10,684 contractors across all business segments and corporate management sites. Of this total of 21,640 personnel, 18,615 were male and 3,025 (approximately 14%) female.

External Initiatives

CMOC is a member of the Chairing Bureau of the China Mining Association, a member of the Executive Standing Committee of the China Nonferrous Metals Industry Association, and a member of the China Chamber of Commerce of Metals Minerals & Chemicals Importers & Exporters (CCCMC). CMOC is also a member of the Cobalt Institute, a non-profit trade association that promotes the sustainable and responsible production and use of cobalt in all forms.

Message from the Chairman of the Board of Directors

2020 was a year full of crises and challenges. It made us keenly aware of the close link between our personal fate, and that of nations and the world at large. It also reminded us that managing ESG risk is the lifeblood of our business, and a safeguard for its survival and future success.

Throughout 2020, Covid-19 placed tremendous strain on health systems, economies, and logistics systems across the globe. However, CMOC rose to the challenge and delivered a satisfactory response. From HQ level down to individual operations, all levels of management showed great leadership and crisis management skills, and our workers demonstrated great solidarity in the face of the pandemic. Our business proved incredibly resilient throughout the pandemic thanks to our robust occupational health and safety management systems and global logistics network. At the start of the pandemic, we instructed domestic and overseas operations to implement strict epidemic prevention measures, stock up on essential supplies, and make appropriate arrangements for personnel. We successfully prevented mass infections at our sites in Brazil and the DRC, and our global production remains stable. In addition, we also provided much-needed epidemic prevention funding and medical supplies to local communities. With respect to the above, I would like to take this opportunity to thank all CMOC employees for their perseverance and dedication throughout the pandemic. We couldn't have weathered this storm without your strength and solidarity. I hope that you will all continue to enforce our strict prevention measures to keep you and your loved ones safe.

In 2020, climate change continued to affect human societies and the natural environment. In response, many countries have made major commitments and efforts to tackle this crucial global challenge. In a speech to the United Nations General Assembly in September 2020, President Xi Jinping pledged that China would achieve carbon neutrality before 2060. All companies and individuals in China will need to shoulder their responsibility to reduce emissions if this ambitious goal is to be achieved. At CMOC, we are proud of the investments we have made in energy transition over the years. The share of renewable energy in our indirect energy consumption has increased for three consecutive years, reaching 56.2% in 2020. Our Chinese sites have also made impressive progress in the development and deployment of electric drive trucks. Looking ahead to 2021, CMOC will set itself medium-term emission reduction targets and make firm commitments to meet the climate challenge.

In 2020, China also achieved a comprehensive victory in the battle against poverty. At CMOC, we can proudly say that we personally played our part in this historic achievement. CMOC started out in Luanchuan county, Henan province, which once ranked among China's most impoverished counties. Over the years, CMOC has made over RMB 150 million in donations to Luanchuan for urban-rural development, poverty alleviation, education, health, and other causes. After years of hard work, in 2019, Luanchuan county was officially removed from China's list of impoverished counties, and in 2020, CMOC featured among China's top 100 poverty alleviation companies. This achievement is just one example of the many contributions that CMOC has made to communities across the globe. In 2020, we continued to pursue an active community investment policy, allocating approximately RMB 160 million in funds across our operations to poverty alleviation, public health, education, agriculture, infrastructure, and resettlement. The company's total global economic contributions amount to RMB 114 billion.

Faced with an uncertain external environment, over the course of 2020, CMOC strengthened its corporate culture to advance its international development. CMOC also upgraded its corporate vision to becoming a "well-respected, world-class, and modern resources company". Of course, sustainable development is an integral part of this ambitious goal. CMOC is committed to responsible mining and trade. Going forward, we will continue to improve our risk management systems, implement leading international standards and best practices, and share the fruits of our development with shareholders, employees, local communities, and host governments to ensure that mining benefits future generations.

Finally, I would like to express my heartfelt thanks to all staff for contributing to the company's sustainable development; to shareholders, local governments, local communities, and NGOs for supporting our ESG work; and to our customers and partners for their continued trust. We look forward to continue working together to pursue the sustainable development of CMOC.

Honglin YUAN
March 22, 2021

Management Approach

As a company continuously progressing in its international development, CMOC fully recognizes the importance of sustainable development in its access to resources, markets, and financing. In recent years, international and Chinese stakeholders' expectations of sustainability-related issues have also been evolving. As a privately held mining company, we face increasingly high expectations and strict regulatory requirements on matters including the environment, tailings, health and safety, and responsible supply chains. We must assume our responsibilities, minimize the impacts of our operations, and share the benefits of our activities with host countries and local communities. In this regard, we keep learning from international good practices and are continually improving the company's sustainability governance framework.

CMOC's compliance and sustainability policies are applicable to the entire group, and all of its directly or indirectly controlled or majority-owned subsidiaries. All of these policies reference international best practice frameworks, including: the sustainable development principles of the International Council on Mining and Metals (ICMM), 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 (UNGPs), the Voluntary Principles on Security and Human Rights (VPSHR), and the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas ("OECD Guidance"). In 2020, CMOC continued to improve its policy framework. It started the update of its *Human Rights Policy* and the development of an *Anti-Money Laundering Policy* and *Data Protection Policy*.

As part of its efforts to implement policies, CMOC continued to step up employee code of conduct training. In 2020, in response to the Covid-19 pandemic, the company delivered its anti-corruption training and *Code of Business Conduct* training courses online. Over 90% of the senior executives completed in the online courses. In addition, in March 2021, CMOC senior executives located in Beijing, Shanghai, and Luoyang also received in-person compliance training, including *anti-corruption* and *Code of Business Conduct*, delivered by a renowned international law firm. The Board Office also circulated HKEX's guide on "Leadership role and accountability in ESG" to all directors and supervisors and delivered sustainable risk management training to senior executives.

External Assurance and Audits

In 2020, we continued to seek external assurance on the implementation of the ICMM's 10 sustainable development principles at our 3 international mining sites, as well as on the progress of alignment with these principles by the group management entity. CMOC has retained the services of Corporate Integrity, Ltd. for this purpose. Due to Covid-19, their assurance review has been conducted remotely. Their assurance statements can be found annexed to this report.

In addition, the expectations of external stakeholders have been evolving in recent years, especially in light of the growth of the renewable energy industry, resulting in increased scrutiny of the sustainability risks in the cobalt supply chain. In order to make further improvements and provide more transparency for stakeholders, in September 2020 TFM conducted a self-evaluation against OECD Guidance and the Responsible Minerals Initiative's Risk Readiness Assessment (RRA). This exercise was reviewed by our assurance provider.

In 2020, CMOC tungsten operation also has been audited against the Responsible Minerals Assurance Process (RMAP) of the Responsible Minerals Initiative. At the time of writing, our tungsten company was on the list of RMAP active tungsten smelters.

All our mining sites undergo recurrent third-party audits to verify their alignment with applicable certification and compliance schemes in environmental, health, and safety management, including ISO14001 and OHSAS18001 (or ISO45001).

Governance

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.

The Chairman of the Board of Directors and the Group Senior Executives are based at the company headquarters in China. Material sustainability matters are addressed at the senior executive level through the Board Secretary function. At the executive level, the Sustainability Executive Committee established by the company in 2019 is a multifunctional organization whose members are nominated from the Board Office, HSE, Internal Control, Legal, Global Supply Chain, Human Resources, and Business Development departments. The Sustainability Executive Committee is responsible to the Strategic and Sustainability Committee of the Board and reports its work directly to the Board Secretary. Its responsibilities include implementing the decisions of the Board and the company's sustainability strategies at the executive level, as well as monitoring and evaluating the sustainability risks associated with the company's operations.

The Board of Directors attaches great importance to risk management and audit procedures. In 2020, we revised and published a series of more stringent group policies and systems, including a comprehensive risk management system, internal control system, and internal audit system. We also established and implemented a risk management accountability and reporting system, designated clear responsibilities for our operations, functional departments, senior management, and audit department, and devised a comprehensive risk prevention and control network with appropriate checks and balances. These measures have helped to further reinforce the company's risk management and audit procedures.

Business ethical values

Our *Code of Business Conduct (CBC)*, *Anti-Corruption Policy*, *Supplier Code of Conduct*, and *HSE Policy* address CMOC positions on business ethics, including anti-corruption and conflicts of interest, as well as the promotion of safe and healthy workplaces. 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 the CBC, other company policies, or the law. They also provide guidance for acting on that obligation, including use of the company's whistleblower channel.

Management of Sustainability Risks

With operations spanning five continents, there are both similarities and differences to the sustainability risks faced by CMOC at each of its sites. Firstly, priority is given to risks associated with the operational environment and occupational health and safety, and a wide range of risk control measures have been introduced to reduce the probability of occurrence. The global outbreak of the Covid-19 pandemic in 2020 also presented numerous challenges for our global operations in terms of public health, international business travel, and logistics, which are discussed in detail in the "Covid-19" section of this report. Differences in sustainability risks arise due to varying natural, economic, social, and human environments. Our NPM operation, located in a developed country, is regulated by a strict legal framework. NPM's main sustainability risk is the arid Australian climate and its impact on mining activities and local communities. The 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. The TFM operations in the DRC 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 artisanal mining and community development. In addition, international attention on the cobalt supply chain in the DRC has also resulted in greater scrutiny from external stakeholders where responsible supply is concerned. As a metals trading company, the main challenges faced by IXM include conducting due diligence of upstream suppliers and ensuring that upstream mines and process plants comply with the environmental and social criteria in IXM's *Sustainability Policy*.

In order to manage the various sustainability risks, the company maintains risk registers at the corporate level and all its international sites, which address material business risks associated with the company's operations, including sustainability matters. These risks are incorporated into operational management processes by developing and implementing action plans for the highest ranked risks. Risk registers undergo regular review by corporate and site management leadership in order to update risk rankings and accompanying action plans and procedures. The corporate risk register is formulated and updated by the Internal Control and Audit department and regularly presented to the Audit and Risk Committee of the Board for deliberation. 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 and good faith efforts are made to implement the due diligence framework envisaged by the OECD Guidance.

Our materiality assessments, stakeholder engagement, grievance mechanisms, and risk registers are processes that help in informing us of our key material issues and areas of risk, and to prioritize risk management activities.

Materiality

Materiality assessment is the process through which we determine the most important issues that reflect its impacts on stakeholders, the economy, the environment, and society, as well as material risks to CMOC’s business in terms of assuring access to 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 sustainability 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, communities, human rights-focused NGO associations, and customers, as identified in the table below. 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, with the following results.



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

Grievance Procedures

To maintain effective stakeholder relationships, we have dedicated systems in place to record and resolve stakeholders' concerns and compliance issues, including those related to employees, the environment, community investment, human rights, land use, and contractor management. In 2020 we integrated the corporate and subsidiary-level whistleblower channels, which have been published on the group's website and the websites of our subsidiaries. The group's compliance team, consisting of members from the legal/compliance department and the sustainability team, is responsible for logging, tracking, and resolving complaints. All mining operations and the trading company also maintain dedicated grievance systems that can receive and register concerns from employees, the community, and other stakeholders, which are then tracked through the various stages of being addressed and resolved. In Australia, for example, residents of the Northparkes Mine community can provide feedback via phone, email, text message, and social networks. The TFM operation manages a community grievance system operated by members of the Community Liaison group. All community members, including TFM employees, may present grievances related to the impacts of our operations in the DRC. In order to provide a better mechanism for collecting complaints from employees and contractors, in 2020 TFM installed complaints boxes at a number of locations across its mining operations. At our operations in Brazil, complaints from employees, the community, suppliers, and partners are received and addressed through a structured management system that tracks, resolves, and then gives feedback to complainants. 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.

In 2020, our mining and trading operations received a total of 249 grievances, of which 116 were closed. Among these grievances, approximately 88% were associated with TFM's operations. Thanks to the efforts of TFM's resettlement team, the number of complaints in the resettlement category has dropped significantly compared to previous years. Roughly 68% of the complaints received by TFM were in the environment category, primarily regarding the discharge of water from the mine pits. TFM established an interdepartmental Community Grievance Response Committee in early 2021 to further enhance community engagement and the handling of historical grievances, aiming to reduce the number of such grievances in the future.

Sites	Resettlement	Environment	Employment	Damages	Social/ community	Health/ safety	Human rights	Security	Land	Other	Total
China	0	0	0	0	0	0	0	0	0	0	0
NPM	0	0	0	0	0	0	0	0	0	0	0
Brazil	0	22	0	1	3	0	0	1	0	2	29
TFM	57	150	9	2	0	0	0	2	0	0	220
IXM	0	0	0	0	0	0	0	0	0	0	0
HQ	0	0	0	0	0	0	0	0	0	0	0
Total	57	172	9	3	3	0	0	3	0	2	249

The Covid-19 pandemic 03

The Covid-19 pandemic first broke out in China in December 2019 before spreading overseas. At the time of writing, the pandemic was still raging across the globe. At the end of 2020, Europe, the Americas, Africa, and other regions suffered a second wave of infections, prompting countries to re-impose strict lockdown measures. Although some countries have already started vaccination programs, current supply bottlenecks and the slow pace of vaccine roll-outs mean that it could be a long time before herd immunity is achieved. As such, for the foreseeable future, it is likely that humanity will have to learn to live alongside Covid-19. As the pandemic continues to evolve, many countries have introduced strict measures to contain the spread and reduce the burden on healthcare systems, generating considerable economic uncertainty and presenting a range of challenges for businesses.

The main challenges that the pandemic has posed to CMOC are summarized below:

First of all is the impact on the workforce. At the height of the pandemic, all operations moved to work-from-home arrangements, with only workers in key production roles remaining on site to maintain operations. Due to socio-economic factors, some mining operations were placed in isolation to reduce workers' contacts with the outside world. However, weeks of isolation had a significant psychological impact on mine workers and increased the complexity of labor management issues. In addition, the imposition of strict border controls in a number of countries resulted in mass flight cancellations, making international travel incredibly challenging. As a result, workers and contractors needed on site were often unable to arrive on time, while expatriate workers already on site couldn't return home on leave. This caused considerable physical and mental exhaustion for workers, leading to stress and anxiety.

On the supply chain side, border closures and port restrictions in some countries resulted in transport routes being congested or cut off completely. Some suppliers were unable to maintain stable production, making it difficult to obtain daily necessities, raw materials, and specialist parts for machinery. Owing to its sound contingency planning, the company was able to guarantee supplies of daily necessities and producer goods across mining operations. However, there were varying delays of supplies and equipment for construction and technological transformation projects.

The pandemic provided a comprehensive test of the company's governance capabilities. It thoroughly tested the leadership and crisis management skills, health and safety management systems, global supply chain, and IT support systems of all of CMOC's operations. At the time of writing, all operations still had strict pandemic control measures in place, and the outbreak had not caused material impact on the company's normal operations.

Uniting against the pandemic

The pandemic eventually spread to all of the countries in which CMOC has operations. At the early stages of the outbreak, on January 26, 2020, CMOC headquarters established a leading group for disease control and prevention led by the Chairman of the Board, which was charged with preventing the spread of the pandemic, ensuring the health and safety of employees, and maintaining stable production at all domestic and overseas operations. While coordinating the fight against the pandemic at domestic operations, the company perceived the risk of the pandemic spreading beyond China and proactively published its own global pandemic control guidelines and pandemic response supply requirements, and the overseas operations were well prepared and took proactive measures ahead of the full-blown global outbreak. From March 2020, as the pandemic worsened, the company shifted the focus of its pandemic control efforts from China to overseas and formulated response measures in light of local circumstances.

Overall, CMOC headquarters and all operations acted quickly to formulate pandemic control measures and contingency plans, assign responsibility, and establish effective communication channels. The company's global supply chain also played an important role in sourcing and deploying pandemic response supplies. The company's response to the pandemic differed greatly according to national conditions and the extent of infections in each country. However, all operations led a full-on response, complying with both local government requirements and the global prevention plan formulated by headquarters. Response measures included the suspension of international and domestic travel, a shift to remote working for workers and contractors in non-production roles, temperature checks at site entrances, health screening questionnaires, additional disinfection and hand-washing stations, the production of Covid safety videos and posters in a number of languages, and the use of TVs and bulletin boards in campus and office areas, as well as social media, to inform workers.

At the start of the pandemic, CMOC headquarters and Chinese mining operations responded to the Chinese government's call to adopt strict pandemic control measures. The pandemic was brought under control relatively swiftly in China, and Chinese operations lifted the restrictive measures and resumed its normal work arrangement in March 2020. At the time of writing, Chinese operations had all formulated pandemic control measures in accordance with local government policies and were operating at normal capacity. In accordance with the Chinese government's Covid-19 vaccine program, towards the end of 2020, CMOC began vaccinating expatriate workers and other employees with travel requirements.

The Democratic Republic of the Congo (DRC) has poor healthcare infrastructure that is ill-equipped to fight pandemics. From the start of the pandemic, TFM maintained close communication with CMOC headquarters, formulated contingency plans, stockpiled large amounts of pandemic response supplies and daily necessities, and implemented strict control measures for campuses and operating areas. From mid-March, when the DRC declared its first case of Covid-19, TFM raised its pandemic control level and imposed strict controls on movements. The company provided all employees with face masks, hand sanitizer, and other PPE and updated its "zero tolerance" policy by including mandatory mask wearing, temperature checks, and social distancing requirements. Based on the advice of medical experts, the company produced Covid safety videos and posters in a number of languages and used TVs and bulletin boards in campus and office areas to inform workers. In accordance with the local government's pandemic control requirements, TFM placed the mine in semi-isolation in May

2020. A system of employee rotation was introduced and all employees entering the site were required to self-isolate for 14 days before returning to work. TFM rapidly established isolation areas that could house up to 500 workers, instituted rapid testing for workers entering or leaving sites, isolated suspected cases and close contacts, and strengthened monitoring of employee health. In August 2020, TFM heeded government orders to end the isolation of the mine and resume normal operations. Over the course of 2020, TFM performed a total of 4,822 rapid Covid tests and implemented 1,042 isolation controls. At the time of writing, strict pandemic control measures were still in place at TFM's campus and operating areas.



During the pandemic, TFM strengthened prevention measures such as access control, temperature checks and disinfection of all operating areas and campuses.

Due to the challenging socio-economic environment in the DRC, TFM was forced to rely on its own pandemic control measures. This presented a significant challenge. After the company decided to isolate the site in March, on-site food and accommodation were provided for approximately 3,000 workers for nearly 7 weeks in order to minimize contacts with the outside world and prevent the spread of Covid-19. The company stayed in close contact with union representatives and obtained the union's consent prior to isolating the site. However, weeks of isolation had a significant psychological impact on the mine workers, and on May 23, 2020, a number of workers went on strike, demanding an isolation allowance, an end to the isolation policy, and the resumption of a normal work schedule. Following negotiations with union representatives, TFM senior management agreed to pay workers an additional isolation allowance. Production resumed on May 24, and the strike action did not have a serious impact on TFM's operations. In addition to complying with local laws and international regulations, respecting the rights and interests of workers, and protecting human rights, CMOC and TFM will continue to strictly monitor the spread of Covid-19 and take all necessary measures to protect the health and safety of workers and ensure the stability of operations.

Brazil was one of the countries worst affected by the pandemic. After the country reported its first confirmed case of Covid-19, CMOC Brasil established a "Covid-19 Committee", which reported the latest Covid-related developments to the group headquarters on daily basis. A series of unprecedented measures were introduced, including strict disinfection, screening, and pandemic control measures to reduce the risk of exposure for workers and their family members. After giving full consideration to the interests of workers, the local community, and government, the company activated its highest-level emergency response plan to minimize the number of on-site workers. A special 24-hour Covid hotline was also established, which enabled workers, their family members, and contractors to speak to medical professionals and ask Covid-related questions or report contacts with suspected cases. CMOC Brasil also published Covid safety guidelines on posters, social media, and its website.

Thanks to the prompt implementation of strict preventive measures at the beginning of the pandemic — in addition to universal testing of workers and a rapid detection, isolation, and treatment policy — CMOC Brasil was able to avoid large outbreaks, and the pandemic had no material adverse impact on operations. Over the course of 2020, CMOC Brasil performed a total of 108,555 rapid Covid tests on its workers, and 1,841 calls were made to the company's Covid hotline.

Due its remote location, the NPM operation in Australia was less affected by the pandemic. NPM closely followed the information and guidance provided by the World Health Organization, medical experts, and government, and made continuous updates to its pandemic response plan in accordance with advice. In March 2020, NPM implemented a series of measures including temperature checks, social distancing, reduced capacity in meeting rooms and vehicles, business travel restrictions, and work-from-home arrangements to ensure the health and safety of workers, contractors, the local community, and other external stakeholders.

IXM has offices in 11 countries worldwide. With the exception of its China office, other offices switched to remote working from the beginning of March 2020. In accordance with the instructions from the group’s Covid-19 leadership team, the Geneva headquarters made advance arrangements to facilitate remote working and minimize disruption to trade. Despite the serious shocks to global supply chains, the company was able to overcome initial difficulties and maintain normal operations.

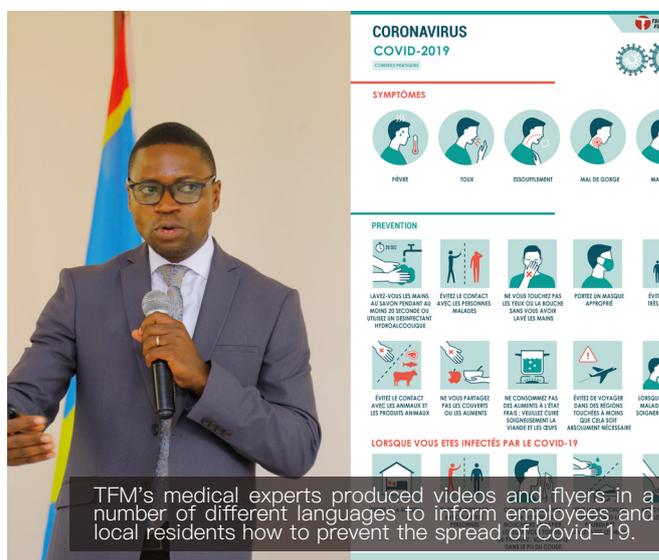
Covid-19 support for local communities

In addition to ensuring the health and safety of its employees, CMOC also fulfilled its duties as a socially responsible enterprise by providing financial assistance and protection supplies to countries hard hit by the pandemic.

During the early stages of the pandemic, China faced a shortage of masks and other PPE. CMOC launched a quick response to source emergency medical supplies from across its domestic and overseas operations. In addition to safeguarding the health of its employees, the company also donated over 2 million RMB worth of surgical masks, protective clothing, gloves, goggles, and other PPE to Luanchuan County and Luoyang City Central Hospital (Henan Province).

In the DRC, TFM donated 550,000 US dollars to the provinces of Lualaba and Haut-Katanga in order to help the government establish a Covid-19 relief fund. It also provided an ambulance for treating Covid-19 patients. In the local community, TFM provided informative videos and other Covid-related information in French and Swahili, which were shared with the local government in Tenke and Fungurume and made available to local residents via TV and radio broadcasts and flyers. The company also donated medical supplies to the local community. In addition, TFM donated 10,000 masks, 300 boxes of disinfectant, 300 boxes of alcohol-based hand sanitizer, and 50 infra-red thermometers to the Denise Nyakeru Tshisekedi Foundation in collaboration with the Chinese Embassy in the DRC and the Association of Chinese Mining Companies in the DRC. The donated supplies were used to support the foundation’s efforts to combat health issues affecting women and children.

In addition, CMOC Brasil donated 20,000 Covid-19 testing kits to the neighboring municipalities of Catalão and Ouidor. The kits were worth a total of 2 million Brazilian real and were used to test workers and local residents. IXM also donated 3,620 surgical masks to medical organizations in Geneva, Johannesburg, Mexico, the US, and Sofia (Bulgaria).



Environment 04

In 2020, CMOC implemented its *Environmental Policy*, which is applicable to the entire group. Environmental aspects figure prominently among the issues of material importance to CMOC, including tailings management, closure planning and reclamation, water management, biological diversity, energy, greenhouse gas (GHG) emissions, and air quality. As a global mining company, CMOC must manage these issues while meeting the challenges of the different climatic, physical, biological, and human environments where we operate. CMOC is committed to complying with environmental laws and regulations applicable to our operations. In addition, we manage the extent of our environmental impact through risk-based approaches to material issues, regulatory compliance, and meeting standards. Every year, we invest in initiatives to improve production efficiencies and manage environmental risks. As a leading international mining company, we undertake our activities with a focus on our environmental obligations.

All of our operations maintain mature Environmental Management Systems (EMS) certified to ISO 14001 standards. These management systems are independently audited at each operating site for recertification and include required training of all employees and contractors on environmental objectives and procedures.

Tailings

From the mine operations, mineralized rock (i.e. ore) is processed and reduced in size to recover the economic mineral. When this ore treatment or beneficiation is done by the processes of crushing, milling, separation, screening and flotation, the remaining material is referred to as tailings. Tailings are composed primarily of the non-ore bearing rock particles (typically fine sand and silt) along with process reagents and water. Most commonly, the tailings slurry is passed through a thickener or filter system to recover process reagents and water before being hydraulically or mechanically transported to an engineered tailings storage facility (TSF). TSFs vary greatly in design, capacity, operation and other factors, but are intended to safely and efficiently store tailings, usually in perpetuity. Construction and expansion of one or more TSFs is often an ongoing process over the operating life of the mine.

CMOC is aware of the history of TSF failures and of their catastrophic consequences for the public, the environment and the mining businesses involved. We understand the importance of responsible tailings management, and that standards will continue to evolve towards reducing the risks associated with these facilities. CMOC's engineering, safety and environmental programs have been established and are continuously improved to ensure that the risks associated with tailings management are minimized for our communities, the environment and our operations.

In 2018, CMOC prepared a set of governance documents that incorporate the initiatives identified above, distributed to site staff as *CMOC's Corporate Governance Standard for Tailings and Mineral Residue Management*, supported by the *Tailings & Dams Quantitative Performance Objective (QPO) Reporting Procedure* and the *Tailings & Dams Stewardship Team (TDST) Program*. This Governance Standard came into force after being signed by the CMOC Chairman in February 2019, and was implemented through 2019 and 2020.

CMOC's corporate standards for tailings management address 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 implements management strategies that include having professionals on staff who are qualified in tailings management at both the operations and corporate levels; retaining qualified consultants and ensuring that an Engineer of Record (EoR) from the consultant is identified for each TSF; designing, constructing, operating and closing our TSFs in accordance with international guidelines; implementing surveillance and monitoring programs; and performing systematic third-party reviews.

In response to the COVID-19 pandemic, CMOC adjusted the scheduling and protocols for completing some elements of its tailings governance framework in 2020, most notably deferring site visits by its TDST to the company's operating mines in Australia, Brazil and the Democratic Republic of the Congo and rescheduling the annual EoR technical inspections to acceptable dates based on national and site-specific travel restrictions. Throughout the year, CMOC's corporate technical staff remained engaged with site-based operations and management personnel, as well as the EoR, via regular teleconference meetings. Despite the ongoing challenges of the global pandemic, CMOC continued to advance sound technical and managerial stewardship at its TSFs and other critical mine waste management facilities with the intent of identifying and mitigating risks while striving for continuous improvement and the implementation of recognized good practices, such as emergency response planning, tailings failure mode analyses and communication with communities, to properly design, construct, operate, maintain, monitor and ultimately close each facility.

Reclamation

In 2020, CMOC continued its practice of applying sustainability principles to the design, development, operation, and closure of our mining operations. Identifying strategies and planning for the closure of a mining or processing facility is of material importance for CMOC and the communities in which we operate, to ensure public safety, protection of environmental quality, and optimal land uses in the post-operations phase. Where practicable, we pursue progressive reclamation during the operational phase to reduce environmental impact. Actions to progressively revegetate disturbed surfaces at our operations help to reduce erosion and dust emissions.



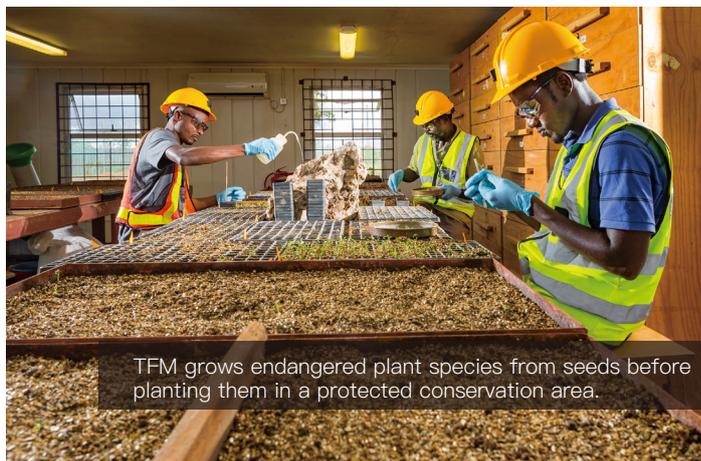
Our China operation continues to carry out progressive reclamation and prevention of geological hazards. In 2020, we restored 230,000 square meters of vegetation at the Sandaozhuang molybdenum mine and 220,000 square meters of vegetation at the Shangfanggou molybdenum mine.

Biological diversity

As stated in our *Environmental Policy*, CMOC is committed to developing internationally recognized practice strategies for managing areas of potential environmental sensitivity and high biodiversity value identified as being impacted by our operations. The environmental impact assessment process is key to ensuring that the effects of our activities on biological diversity are appropriately recognized and mitigated. These programs are founded on baseline assessments of biological resources in the areas of planned operations, which are described in terms of species composition and species of concern, as well as supporting habitats at local, regional, and if appropriate, global levels. Baseline descriptions allow accurate identification of impacts anticipated from greenfield or brownfield project development. Accurate impact definition in turn drives application of the mitigation hierarchy in typical stages, such as 'avoid, reduce, mitigate, and offset' and the subsequent development of biodiversity management plans if needed.

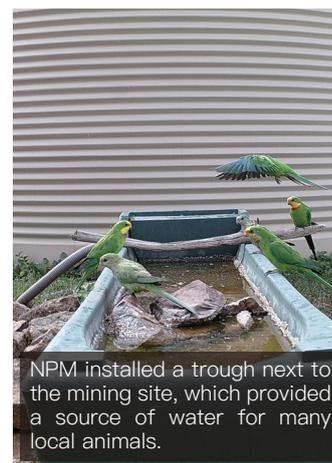
The actions described above, associated with project environmental impact, are a common requirement under the regulatory systems that govern our operations in various countries. At our TFM mine in the DRC, the company also aligns with internationally recognized practice frameworks, including the guidelines and standards of the International Finance Corporation (IFC), notably IFC Performance Standard 6 on Biodiversity Conservation and Living Natural Resources. CMOC's operations are also governed by individual site environmental policies and procedures that recognize biodiversity risk.

At TFM, the leading biodiversity conservation issue continues to be associated with plants adapted to the local soil and climate with naturally occurring high concentrations of metals. These 'metallophyte' plants are of high interest to the scientific community due to their ability to tolerate concentrations of metals, chiefly copper and cobalt, that would be toxic to most plants. Furthermore, these plants occupy a highly restricted and heavily exploited habitat type; their growth in areas with high-grade ore deposits leads to limited distribution (i.e. endemism) as well as a direct threat from historic and active mining in the region. The conservation efforts of TFM with regard to metallophyte studies and preservation have pioneered and greatly furthered scientific knowledge about this unique plant life. In 2020, TFM continued its biodiversity programs and relocated critical habitat flora to artificial ecosystems. In addition, TFM continued to monitor the species richness of aquatic animals and the levels of heavy metals in their tissues, as well as track the movement of wild animals. TFM also organized educational events for local employees and primary school children in order to raise awareness of the company's environmental management system and measures to protect the natural environment.



TFM grows endangered plant species from seeds before planting them in a protected conservation area.

In 2020, we continued to implement the Kokoda Biodiversity Offset Project at our NPM operation in Australia, which aims to restore the Grey Box Grassy Woodlands ecosystem. NPM worked with other organizations to train 12 members of the local indigenous community in grassland and plant conservation. These trainees worked together with the team to complete the implementation of Kokoda’s key biodiversity and revegetation projects. The area surrounding the NPM is home to a diverse range of flora and fauna, including some protected species. During the most severe phase of the drought at the end of 2019, our environment team installed a trough at the edge of the mining site to provide a source of water for local animals. Cameras were installed at the trough, which captured images of numerous animals including superb parrots, echidnas, and kangaroos.



NPM installed a trough next to the mining site, which provided a source of water for many local animals.

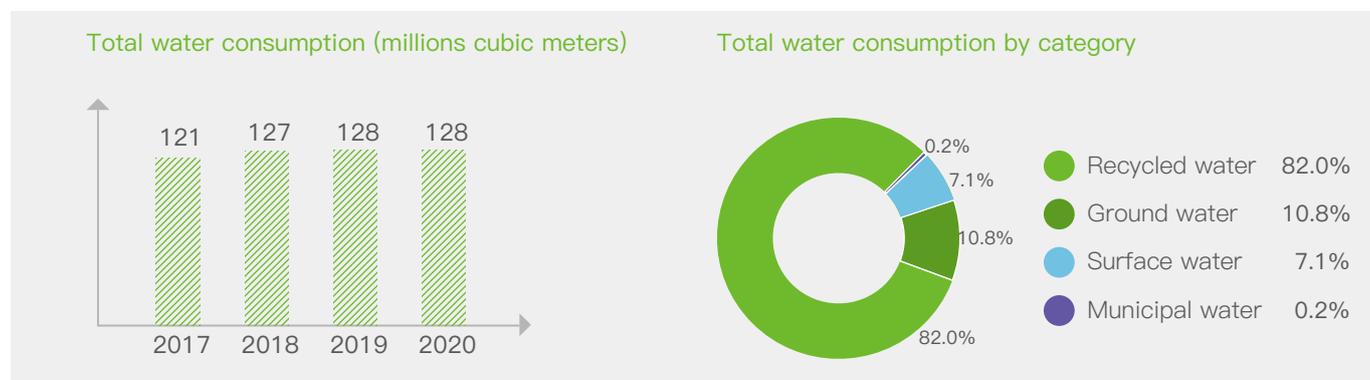
In Brazil, our operations are located in the Cerrado savannah biome and the Atlantic Forest biome, areas which are particularly rich in biodiversity. In accordance with legal requirements, we continue to carry out biodiversity conservation actions embedded within an active reforestation program linked to the use of biomass at the Catalão site in the state of Goiás. In 2020, about 45,000 native seedlings were planted over an area of approximately 27 hectares. This activity is contributing to the revegetation of areas of permanent preservation and their surroundings, as well as to the conservation of plant and animal species.

Resource management

CMOC is committed to responsible stewardship of the resources we use 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.

Water

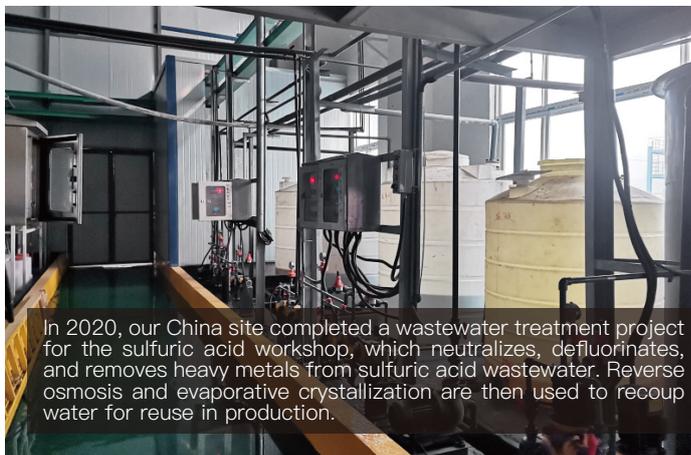
We recognize water as an essential resource for the mining and processing of ores, and sustainable water sourcing is a basic strategic need common to our businesses and the surrounding communities. We use water for processing ores, for dust control and for drinking, and therefore the efficient management of water resources is key to our operations. A significant amount of water used on our sites is recycled water from our own operations, and other makeup water is sourced from surface water, groundwater, and municipal sources. In 2020, we consumed 128 million cubic meters of water (3.048 cubic meters per tonne of processed ore), of which approximately 82% was recycled water.



Sourcing water for each operation varies according to regional availability and climate. Collectively, most of our water is recycled, supplemented in order of volume by groundwater, surface water, and municipal water. All CMOC operations utilize recycled water. At all of our mining operations, process water is used to transport tailings from processing areas to the tailings storage facilities. The sandy solids of the tailing material settle, and the clarified water is recovered to be reused in the production process.

In 2020, we continued to install water-saving technology at our China site to improve water efficiency, including recycling water from magnetic separator tailings to supply pumps used in the iron separation process, and reusing neutralized acid wastewater in the production process.

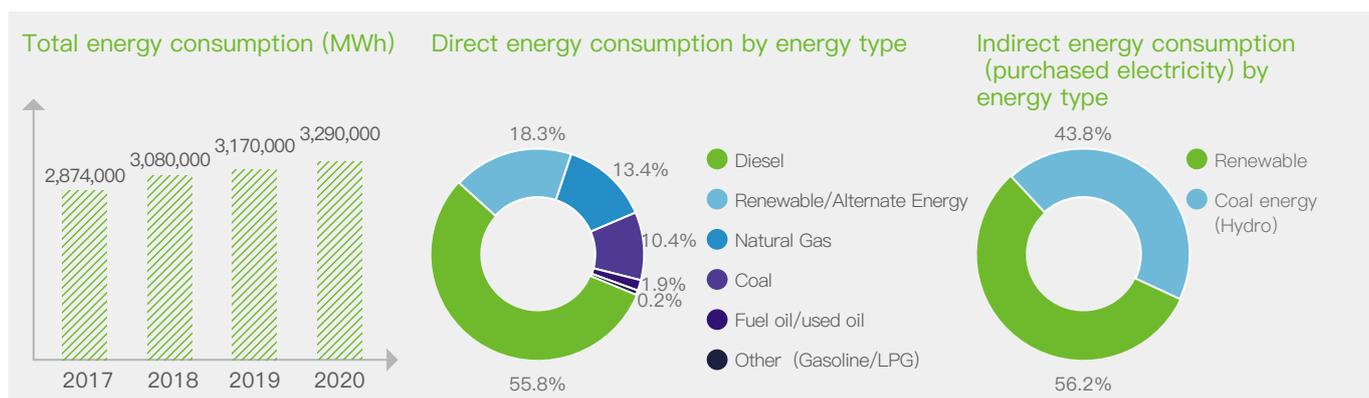
The company is committed to the protection of local surface and groundwater systems. Each of our operations employs a variety of techniques and strategies for water management with the primary objective of complying with applicable laws and regulations and the minimization of impact. These strategies may include the use of water monitoring programs, lined surface impoundments, stormwater controls, and other physical or procedural systems for the protection of surface and/or ground water resources. For example, in Brazil we improved our drainage system by installing new storage facilities to prevent overflows and soil erosion during periods of heavy rainfall. The Northparkes mine is the only CMOC operation that is situated in a region with scarce water resources. The 2019–2020 drought added to concerns about water shortages, but an increase in rainfall over the course of 2020 helped to allay these concerns. The drought did not have an impact on our operations. This year, NPM updated its Flood and Drought Trigger Action Response Plan and conducted drought and flood risk assessment based on rainfall over a given period.



Energy

Today’s large-scale mining and processing operations require significant amounts of energy. Our operations consume energy both directly by the use of diesel, natural gas, and biofuels, as well as indirectly from purchased power sources such as hydropower, coal, natural gas, and renewable energy sources. In addition, our operations examine all practicable opportunities to enhance the energy security to ensure our access to affordable and dependable energy; to improve energy efficiency and to make further use of renewable and low carbon energy sources. Due to business expansion, our total energy consumption increased by 3.8% from 3,170,000 MWh in 2019 to 3,290,000 MWh in 2020. This equates to an intensity of 0.078 MWh per tonne of processed ore. In 2020, 55.8% of our direct energy consumption was from diesel and 18.3% from renewable energy sources. Of our indirect energy consumption, 56.2% was from renewable energy sources such as hydropower.

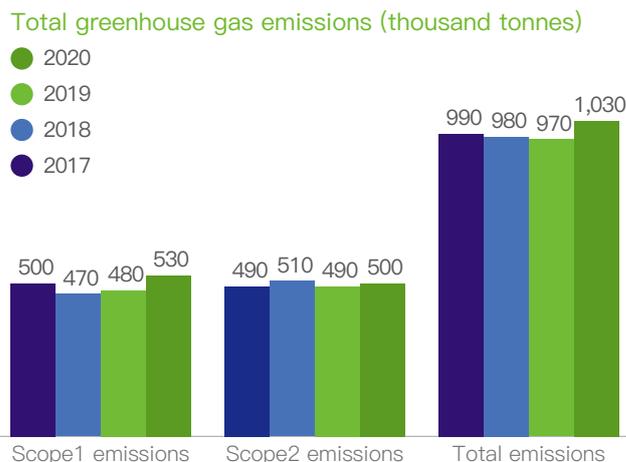
In 2020, our Chinese operations implemented a number of measures to reduce electricity consumption during production, such as upgrading permanent magnet motors, fitting autoclave motors with variable-frequency drives, installing energy-saving drying technology for tungsten concentrate, and optimizing froth flotation processes. By the end of the reporting period, these measures had helped our Chinese operations to save a total of 8,874.9 MWh of electricity. Both our DRC and Brazilian sites use cogeneration in their acid plants, with electricity production in 2020 reaching 66,000 MW and 56,000 MW respectively. Our Brazilian site also implemented a wide range of measures to save energy and prevent wastage, including the installation of energy-saving light bulbs and the use of improved oil tanks.



GHG emissions

Our Scope I direct greenhouse gas emissions are mainly generated from diesel and natural gas. Diesel fuel is primarily used to power the haulage fleets at each of our operations, and natural gas is mainly used in the drying of our product in Brazil. Our total GHG emissions measured as carbon dioxide equivalent emissions in 2020 were approximately 1,030,000 t CO₂-e, or 0.025 tonnes per tonne of processed ore. About 20% of our direct energy consumption is generated on site from cogeneration and renewable energy sources, which helps to reduce our dependence on fossil fuels.

In 2020, our Scope II indirect greenhouse gas emissions from purchased electricity were approximately 500,000 t CO₂-e, or 0.012 tonnes per tonne of processed ore. 56.2% of the purchased electricity for our worldwide operations comes from hydropower in the DRC and Brazil.



Emissions and discharges management

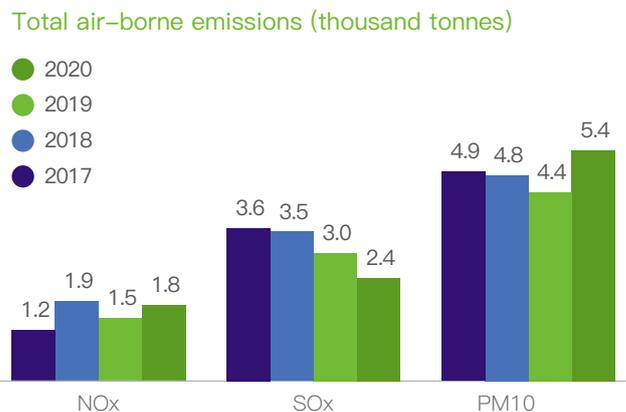
CMOC operations are committed to the process of continuous improvement through our environmental management systems and to pursuing new opportunities to reduce pollution and minimize environmental impact associated with air and waste emissions. We implement appropriate control measures for managing air and waste emissions to ensure compliance with applicable environmental standards. Our systems are designed to comply with the relevant laws and regulations that apply to our facilities in the countries where we operate.

In 2020, environmental fines or notices received by our operations were generally for minor non-compliance issues. These related to the overflow of treated wastewater at our Brazilian operations in Catalão and Cubatão. No pollution or environmental degradation was found in relation to the Catalão incident, and the company adopted a series of measures to prevent future incidents and monitor wastewater on a daily basis. The Cubatão incident resulted in a change to the pH level of the water. The company therefore immediately stopped the discharge of wastewater and monitored the water quality along each drainage point on a daily basis. In 2020, total environmental fines received for all CMOC operations were less than RMB 20,000.

Air quality

The primary sources for air emissions, including nitrogen oxides, sulfur oxides, and particulates, are associated with vehicle use and industrial production.

Particulate matter emissions are a primary concern for any mining operation. Potential sources for dust emissions include mine hauling, ore transfer, blasting, crushing, fugitive dust, and other industrial process sources. On our roadways, we use management controls such as treatment of road surfaces, regular road maintenance, and speed limits to minimize the generation of dust. In 2020, the nitrogen oxides and particulate matter emissions increased mainly because of the longer distance of truck transportation of ores in TFM mining pits.



At our Chinese operations, we upgraded our dust filtration systems, replacing baghouse filters with cartridge filters, and built enclosed material conveyor belts and vehicle washing stations to improve our dust filtering capacity. Through a similar approach, we continue to invest in strengthening the management of emission control systems and adopting various methods to minimize other air-borne emissions from our facilities. In 2020, our Chinese operations invested RMB 800,000 in a new low emission, medium-temperature SCR denitrification system, which effectively reduced emissions of nitrogen oxides.

Our Brazil operations also upgraded a number of processes and equipment to reduce dust and other air-borne emissions, such as the installation of water spraying equipment at crushing stations, additional dust collection equipment, and a new gas scrubbing system. The use of progressive reclamation at our Australian operations has been effective in reducing the potential for wind-blown dust from tailings storage facilities. In 2020, NPM planted 78 hectares of barley at its 2nd tailings storage facility to increase vegetation cover and prevent wind erosion. The environment and agriculture teams also experimented with the planting of local species, which are expected to self-regenerate from one season to the next and reduce wind-blown dust.



Waste management

Tailings and waste rock produced from our processing and mining activities form the largest volume of waste associated with our operations. In 2020, approximately 39 million tonnes of tailings and 111 million tonnes of waste rock were produced by our global operations. Both figures increased compared to 2019 due to yearly variability in mine plans. These materials are managed according to applicable laws and standards. Storage facilities are engineered and designed to minimize risks associated with slope stability, geochemistry, safety, and environmental impacts.

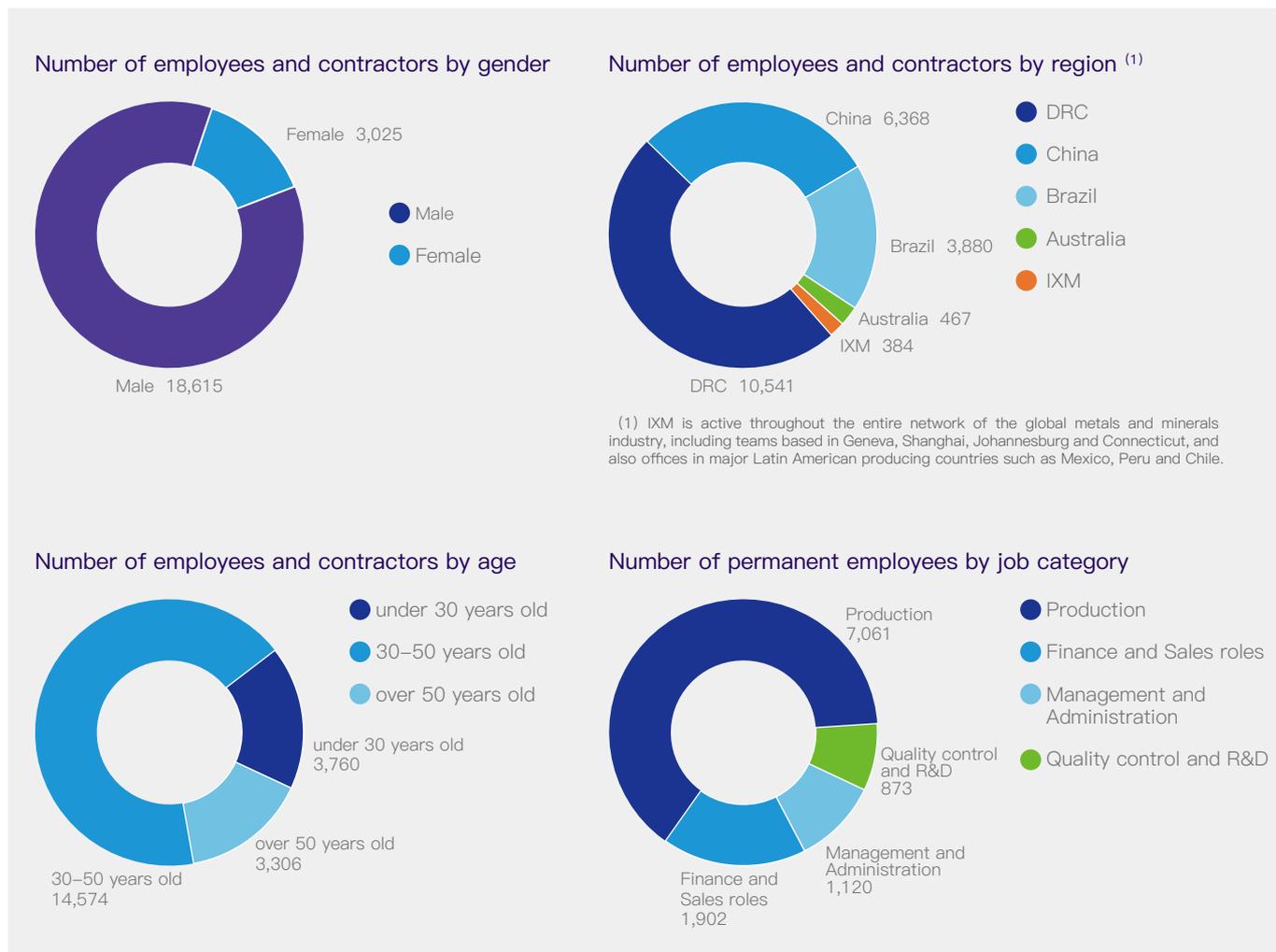
Other waste generated by our operations includes both non-hazardous and hazardous waste streams. We manage waste generated by our activities to minimize disposal volumes. Waste may be managed onsite in approved facilities or shipped to offsite recycling, treatment, storage, or disposal facilities. Recycled waste may be managed on site or off site depending on the specific character and reusability of the waste.

In 2020, TFM improved the processing of waste lead from electrowinning and continued to recycle waste oil. NPM also adopted measures to increase the recycling of waste metals.

Waste	2020 volume (thousand tonnes)	Intensity (tonnes per tonne of processed ore)	Percent recycled	Type of waste
Non-hazardous waste	19.0	4.524x10 ⁻⁴	20%	Scrap metal, domestic waste (disposable products, kitchen waste, waste paper, etc.), waste food, ferromolybdenum slag, coal slag, calcium slag, phosphorus slag
Hazardous waste	7.0	1.667x10 ⁻⁴	24%	Used oil and grease, mixed industrial waste, acid sludge, used catalysts, used sodium cyanide containers, or used oil containers

Employees 05

At the close of the 2020 reporting period, CMOC had 10,956 employees across its operating sites and management offices, as well as 10,684 contractors. Approximately 14% of the workforce was female. Roughly 18% of the workforce were under the age of 30, 67% were aged between 30 and 50, and 15% were over 50. 65% of the CMOC employees was employed in production, 8% in quality control and R&D, 10% in management and administration, and 17% in finance and sales roles.



In our labor relations, CMOC aims to comply with the requirements of ILO Conventions and local labor laws and regulations, and establishes fair employment mechanisms. Although some sites do not operate under collective bargaining agreements, all 10,956 employees in our worldwide operations have the right to freedom of association and collective bargaining. In 2020, 4,956 members of our global workforce were covered by collective bargaining agreements (45%). 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. CMOC values communication with employees. The grievance mechanisms provided by the group and each of its operations are available to all employees and contractors, and employees are encouraged to provide feedback.

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 2020, the turnover rate among CMOC staff and contractors was 24%. Turnover was highest among contractors employed by CMOC Brasil and TFM.

Safety

Reflecting our commitment to safe operations, CMOC’s health and safety management systems integrate risk-based processes and regulatory compliance measures designed to prevent accidents and occupational hazards. CMOC’s *Health, Safety, and Environment Policy* is applicable to all of the company’s global operations.

At our Chinese mining operations, we are committed to providing a zero-harm workplace and have developed a comprehensive and systematic safety management regime. We continue to implement the *Ten Safety Principles* and carry out regular safety inspections and other targeted inspections. All identified and reported weaknesses are addressed through a closed-loop correction system. In addition, in 2020 we issued the *Change Management Procedures* to promptly handle changes and eliminate or reduce the potential for change-induced incidents. In June 2020, we successfully completed a flood prevention drill at our tailings storage facility (TSF) in Henan province and optimized our early warning system to include all major hazards and risks. This culminated in the recent launch of a WeChat-based early warning system covering key TSF parameters. Due to Covid-19, offline training sessions were replaced by online safety training and quizzes. In 2020, safety training was provided to over 6,000 employees to raise awareness of occupational safety. The safety management system in China is certified annually in accordance with the certification requirements for OHSAS 18001.



2020 flood prevention drill at our tailings storage facility in Henan province

Health and safety practices at our TFM mine site are certified annually under the OHSAS 18001 management system, and the site has procedures and programs in place to ensure compliance with international safety standards. TFM’s HSE Committee is comprised of representatives from each department, and holds monthly meetings to discuss on-site HSE performance. Compliance is monitored by internal audits, workplace inspections, manager inspections, and other types of reviews. TFM also provided additional training for contract workers and contract safety officers. At our TFM operations, all new employees receive a safety induction and are trained and certified for jobs that involve high risks. Annual safety refresher courses are obligatory for all employees. In 2020, despite the forced postponement of some training courses due to Covid-19, over 90% of employees participated in safety training (including safety inductions and annual refresher courses), rising to 100% of new employees and newly promoted managers and supervisors.



Members of TFM’s HSE Committee conduct an on-site visit to assess safety performance

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Coordenado no WhatsApp do CMOC (33) 99786558 para obter mais detalhes sobre o conteúdo de segurança corporativa. Cód. e programação © Sociedade Brasileira de Segurança

In December 2020, CMOC Brasil organized a Workplace Accident Prevention Week (SIPAT), which aimed to increase awareness of risks and the right to refuse unsafe work. This year’s SIPAT events were all held online, and explored themes including risk awareness, fatigue management, the impact of change management on the organization, alcohol and substance abuse, sexually transmitted diseases, and awareness of environmental risks. Approximately 350 employees and contractors attended online seminars each day.

At our Brazilian operations, HSE systems are also certified annually under the OHSAS 18001 safety standard. In 2020, CMOC Brasil restructured its safety team in order to build a stronger safety culture and boost operational agility and safety performance. The company also conducted more thorough investigations into lost time injuries and occupational fatalities, improved measures to identify and rectify unsafe work environments, and reported progress on the company’s action plan to the Board of Directors on a weekly basis. In addition, CMOC Brasil published a *Health and Safety Priority Action Plan*, which listed five key priorities: the improvement of structural integrity, assessment of leadership skills, on-site monitoring by supervisors, interviews with workshop employees, and reviews of operating procedures. The *Health and Safety Priority Action Plan* is designed to provide solutions to major safety issues; actions are reported on a weekly basis, and progress is monitored by a designated member of staff. In addition, the company continues to use the “Safety Acts” management tools to reinforce safe practices. It also organizes online safety campaigns such as the “Workplace Accident Prevention Week”, which uses interactive training methods to enhance employees’ understanding of the safety “Golden Rules”.

Our NPM mine in Australia has a comprehensive HSE system modeled on the zero-harm policy that we have been implementing since 2012, focusing on the safety of employees, equipment, environment, and the community. Regular training is provided to improve employees' awareness of safety issues, and a safety assessment is conducted for all equipment, manufacturing processes, and work tasks. The HSE management system at our NPM mine is subject to recurring regulatory oversight which is more stringent than OHSAS standards.

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 2020, CMOC reported 52 recordable incidents from a total of 41,599,090 hours worked, equating to a TRIR of 1.25 per million hours worked. There were 12 lost time injuries, equating to an LTIR of 0.29 per million hours worked.

Regrettably, in 2020 CMOC reported two occupational fatalities across its global operations, including a contract worker at the TFM site in the DRC and an employee at CMOC Brasil. Any loss of life in our workplaces is unacceptable, whether it involves contractors or our own employees. We conducted comprehensive investigation and root cause analysis after both of these accidents, and adopted appropriate corrective measures.

The first accident occurred at the TFM mining site in May 2020, when a contractor's truck overturned whilst being towed by a loader. The driver proceeded to jump from the driver's seat, but did not survive the accident. After investigating the cause of the accident, TFM conducted a comprehensive audit of the contractor's safety management system, safety procedures, emergency drills, and safety training in order to identify areas for improvement, and monitored the implementation of the contractor's updated procedures. Improvements were also made to internal and other contractor safety procedures in order to eliminate potential hazards.

The second fatality occurred in October 2020 at a facility belonging to CMOC Brasil's phosphate business. An employee fell through a grid cover of the drainage and died shortly afterwards, despite the best efforts of paramedics. A root cause analysis was conducted and the main reasons for the accident were a defective manhole cover and a lack of technical procedure of structural integrity verification. CMOC Brasil immediately inspected and tested all potential structural risks and checked the structural integrity of all facilities, and enhanced its technical procedure and inspection routines of structural integrity in all facilities.

CMOC Brasil's phosphate operations also reported another serious accident. In May 2020, an employee had his right forearm trapped in a moving conveyor belt, resulting in amputation. Following this incident, our Brazil operations implemented a series of safety action plans, including educational campaigns and contingency management policies to boost awareness of the 'Golden Rules', a review of equipment safety procedures, and stipulating the on-site responsibilities of operational supervisors.

Addressing safety-related issues is of paramount importance to the company. In light of the recent accidents, the group CEO required all operations, subsidiaries, and affiliated organizations to review their safety procedures and take immediate action to eliminate potential hazards. The group's headquarters was also instructed to monitor progress on a regular basis.

Health

The complex and unique working environment of the mining industry can potentially put employees at risk of occupational illness. We therefore strive to promote the mental and physical well-being of our employees by creating a safe working environment, carrying out health promotion and disease prevention programs, organizing various after-work activities, and enriching employees' lives in other ways. We also pay for employees' basic medical insurance at all of our sites.

Occupational health

Health management specialists at our operations identify, manage, and control potential causes of occupational illness, emerging health problems, and critical risks that threaten occupational health. At our Chinese site, we established a "Leading Group for Occupational Health Management", as well as the *China Molybdenum Occupational Health Management System*, which takes into account our business activities, work environment, and employee health. In 2020 we also introduced a new set of standards governing hazardous chemical agents ("Occupational Exposure Limits for Hazardous Agents in the Workplace: Hazardous Chemical Agents"). We manage

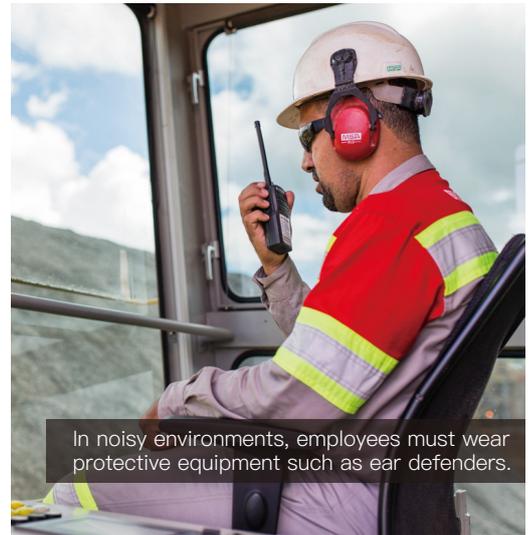


TFM's industrial hygienists conduct tests of a confined space as part of equipment maintenance procedures.

occupational health risks through periodic physical examinations, regular job rotation, and improving training on occupational health hazards. In 2020, we continued to appoint third-party organizations to provide occupational health training to our safety management staff and assess occupational hazards in our workplaces.

Dust, a leading threat to employee health, can be produced by blasting, ore loading and transport, crushing and other handling during the production process. Unprotected, long-term exposure to dust may lead to health issues. To reduce employees' exposure to harmful dust, some of our mitigation efforts include the wetting or sealing of roads, containment of dust-producing equipment, technical controls such as increasing automation in ore transportation, crushing, and packaging to reduce employees' exposure to dust, and procedural controls such as requiring employees to wear protective equipment such as dust respirators in appropriate circumstances.

Chronic exposure to noise from transportation, crushing, and milling of ores is another threat to employee health. To reduce employees' exposure to harmful noise, we take preventive measures such as reducing vibration in major noise sources, building plants with noise absorption materials, setting up sound-proofed rooms for employees, performing regular noise monitoring, and implementing the use of hearing protection.



Illness prevention for employees

We are committed to improving the physical and mental health of our employees. In addition to providing medical help for sick employees, we also invest in illness prevention measures in order to identify and treat health problems as soon as possible and eliminate the root causes of sickness.

Our workplaces are often situated in remote areas and lack adequate medical resources. In order to provide convenient medical services for our employees in China, we have set up an on-site medical clinic in cooperation with Luoyang Central Hospital. Each week, we invite medical experts in different fields to provide health consultations for our staff. Employees are also offered biennial health check-ups to identify health problems as early as possible. In 2020, the union also invited medical experts from Luoyang City Central Hospital to give health knowledge lectures to employees. At our TFM operations in the DRC, we have established medical facilities that are supported by referrals to local hospitals and specialists.

Following the global spread of Covid-19, CMOC headquarters and all of our operations adopted stringent control measures to help protect the health and safety of our workforce. For more information on these measures, please refer to the "Covid-19" section of this report.

Employment

We are committed to all aspects of employment, including fair labor relations, equal employment, and career development. We develop our employment policies, such as working hours and holidays, in accordance with local labor laws and ILO conventions. At CMOC, we have a corporate culture that aims to promote the career development of our employees.

Labor relations

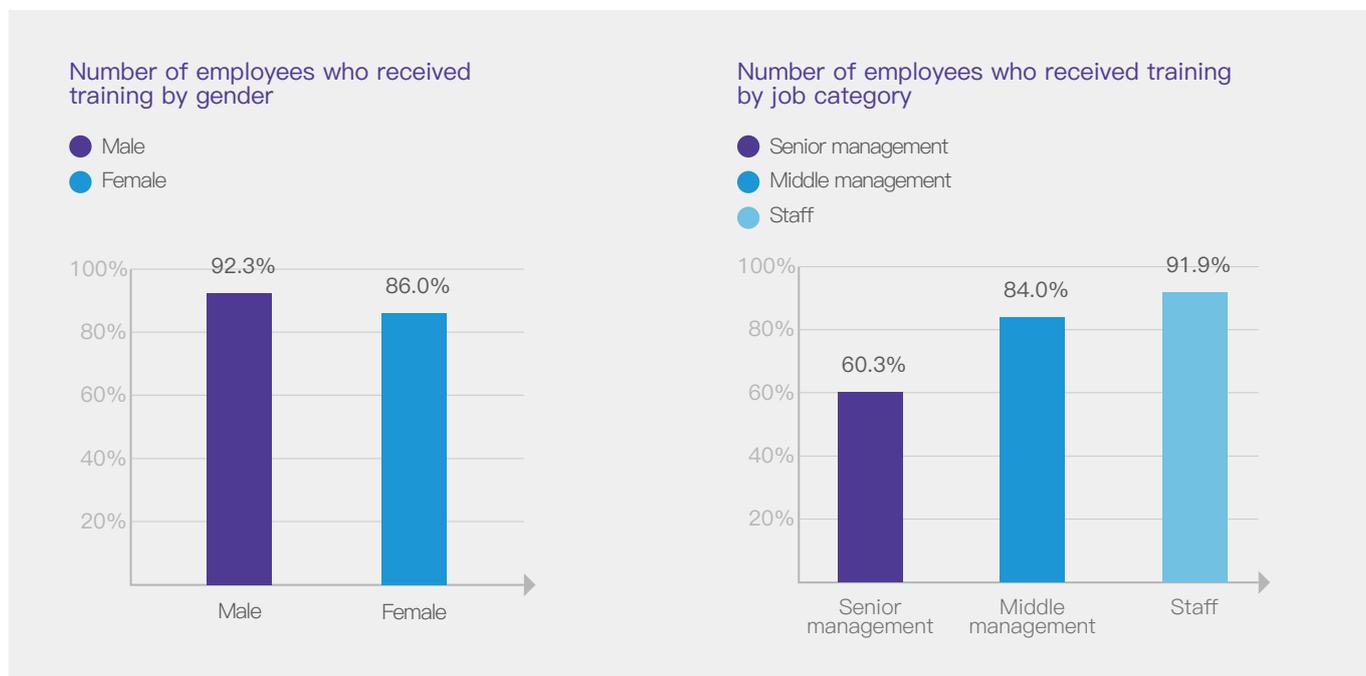
In accordance with CMOC's core values and *Human Rights Policy*, we respect the rights of all employees, and strive to provide an environment that ensures fair treatment and good working conditions. Employees have access to internal grievance mechanisms through which they can report and resolve workplace complaints or concerns. *Our Human Rights Policy* recognizes our employees' rights to freedom of association and collective bargaining.

Equal employment

In keeping with the principle of equal employment, CMOC recruits and hires professionals through various means including open recruitment and competitive employment, and provides diversified and equal career development opportunities for employees. As stated in the *Code of Business Conduct, Human Rights Policy*, and procedures at our operating sites, we do not allow any employment discrimination based on race, ethnicity, religion, gender, age, 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.

Career development

Our career development system provides opportunities for internal training, posting to other CMOC sites, and incentive-based development programs. In 2020, 91.4% of CMOC’s workforce received training, with each employee receiving an average of 28.8 hours of training.



At our Chinese operations, we constantly improve our training systems to support career development and help our employees improve their professional skills and competence. We have set up targeted training programs for managers, skilled workers, and employees in functional departments to meet the needs of each department. In terms of training methods and training staff, we try to combine internal and external resources for better results. Due to Covid-19, in 2020 we established a cloud-based learning platform that allows users to connect across different time zones and regions. Online learning tasks, training resources, and tests are sent to employees on a regular basis. We also converted a disused plant into a training center with hands-on simulators in order to give employees the opportunity to put the skills learned from online classes into practice. In addition, we organized business English and Portuguese language classes for new graduate staff and other talented employees from across our operations in order to facilitate overseas postings. In 2020, 100% of employees at our Chinese operations participated in at least one training course.

In 2020, IXM and CMOC headquarters jointly organized the 1st joint Graduate Trainee program, in which 8 university graduates have participated. Guided by their appointed mentor and rotation manager, with their progress monitored and reviewed closely by HR, they will spend 6 months in two different departments to complete their assignment year. At the end of the period, mentors, managers and HR departments will evaluate their basic skills, work capacity and attitude and finally, trainees will be offered a permanent position within the CMOC group.



In December 2020, eight university graduates in the trainee program have started working at IXM Shanghai office.

At our TFM operations, over 90% of employees participated in safety training in 2020, and 30% completed environmental management training. In total, 10,504 employees and contractors participated in training — 99.7% of our total workforce. At our Brazil operations, employees receive mandatory training in occupational health and safety, technical competency, behavioral skills, and professional development, ensuring that skills are developed in line with the company's strategy. In 2020, 66% of employees at our Brazil operations received training. In 2020, NPM provided training in 10 different modules, including compliance, emergency response, high risk work licenses, and a wide range of other skills. 100% of employees received training in at least one module. In addition, the group headquarters provided induction training for new employees, as well as leadership training for management and executive-level staff. 27% of employees participated in these training sessions.

Community 06

CMOC's *Community Policy* is applicable to all of the Group's operations. We are committed to conducting activities in a manner that promotes positive and open relationships with local communities. We continue our engagement with and investment in communities affected by our mining operations, using multi-channel grievance systems to collect their feedback and concerns. We develop infrastructure, support health, safety, and education efforts, and provide local employment and business development opportunities. Our goal is to build such partnerships at all levels of community, from local to national, by making long-term positive contributions and effectively mitigating adverse impacts from our operations. Stakeholder relations across the international portfolio are guided by a risk-based approach, wherein community development plans are formulated after evaluating the expectations and needs of communities. At our NPM, Brazilian, and DRC operations, stakeholder communications, community risk, and impact management and community investment plans guide our external engagement efforts. At our Chinese site, the national priorities of the government also play a role in driving community relations and associated investments. In all cases, stakeholder engagement is based on mutual trust, communications based on transparent dialog, and the effective mitigation of impact coupled with the enhancement of positive effects from mine operations. CMOC understands that these aspects are material to the success of our mining business.

Community relations programs at CMOC's international sites are guided by local laws and regulations and seek alignment with international best practice frameworks such as the Performance Standard 5 of the International Finance Corporation and the ICMM sustainable development principles. Social engagement and community investment activities may also be governed by commitments made through the process of Environmental and Social Impact Assessment or their equivalents under national regulations.

Our operation in China closely aligns community spending with government development priorities and makes pertinent community investments to enhance performance in achieving those priorities. The Chinese operation is located in Luanchuan, a small mountain county in Henan province rich in minerals but with scarce agricultural resources. The county suffers from frequent floods and landslides, and some areas remain underdeveloped. As an important company in Luanchuan County, we have long contributed to local development. As of 2020, our multi-year investment programs have cumulatively contributed over RMB 150 million in donations to the county for social development, poverty alleviation, education, health, and other causes. Following many years of effort, in 2019, Luanchuan County was officially removed from China's list of impoverished counties. Our contributions have received widespread recognition, and in 2020, CMOC ranked among China's top 100 poverty alleviation companies.

In the DRC, our operation is located near rural villages, agricultural land, and two towns which have steadily undergone significant population influx and urbanization in recent years. According to current estimates, the total urban and rural population of TFM's 1,500 km² concession area is around 400,000, which has presented new challenges for our community work. The sustainability programs at this site address acute community development priorities while striving to balance the limited human and material resources of the company and the rapid growth of the migrant population. Therefore, we have strengthened communication and cooperation with all stakeholders. In July 2020, TFM began compiling its *Scope Statement for Community Development* (Le Cahier des Charges pour le Développement Communautaire). In accordance with the requirements of DRC's new 2018 Mining Code, TFM coordinated with the development committees of Bayeke Chieftainship and Fungurume Town, and after sounding public opinion, initiated programs that are tailored to the economic development priorities and needs of local people. In the *Scope Statement*, which was concluded on January 20, 2021, TFM committed to invest US\$31 million in community development between 2021 and 2025, targeting eight priority needs: health, education, economic development, roads and bridges, electricity, sports, infrastructure, and telecommunications.

Our mines in Australia and Brazil are sited in areas that are largely rural, with surrounding land uses dominated by agriculture. NPM and CMOC Brasil continue to strengthen the effectiveness of community plans through transparent identification of impact, communication through stakeholder forums, and the maintenance of systems to register and respond to major community concerns. NPM's community programs have four key focus areas: economic development and livelihoods, education and training, health and safety, and indigenous support projects.

At our Brazilian operations, based on social diagnosis of community expectations and international good practices, the following are our community investment goals: promote dialog and engagement with stakeholders; promote the management of social and environmental impacts; generate economic, social, and environmental value for local communities; contribute to quality of life and social and environmental sustainability; and strengthen the company's reputation and social license to operate. Due to the impact of Covid-19, CMOC Brasil's community programs focused mainly on agriculture and community health in 2020. By taking a community-oriented approach, we are able to maintain good neighborly relations because communities derive benefit from our operations in ways that matter to them.

Stakeholder engagement

CMOC's operations are located in diverse settings where cultural and economic conditions can vary greatly. Therefore, active engagement with stakeholders near our mines is a common element in successful community relations and in managing risk related to our operations. Community relations are managed at appropriate levels of engagement that may include local government agencies, non-governmental organizations (NGOs), the media, traditional leadership, community groups, and individuals that may have a broad array of interests in our operations.

An important aspect in maintaining effective community relations are our systems for logging and responding to community concerns, such as environmental, social investment, human rights, land acquisition, and recruitment of employees. All of our operations maintain systems that can receive and register individual community concerns and grievances, which are then tracked through the stages of being addressed and resolved.

At our Chinese operations we have a community grievance mechanism, and staff are regularly trained to ensure that the mechanism operates effectively. We encourage local stakeholders to make full use of this mechanism to communicate with the company. When local residents have concerns, our community relations staff have the responsibility to verify and address them in a timely manner and report the results to local people.

At our TFM site, the company engages with stakeholders on a regular basis in order to better understand their interests, concerns, and goals. The Community Development Forum continues to serve as a primary means of gaining input on the community's priority development needs, with particular regard to the Social Community Fund (SCF). This forum consists of representative stakeholders from nearby communities. The SCF was created through contributions from the TFM operation and responds directly to community priorities in the areas of infrastructure, education, health, and income generation. Since inception in 2009 through December 2020, this fund has received contributions of US\$46.95 million to support its programs, of which US\$4.81 million was given in 2020. TFM also maintains a Community Liaison department, which staffs permanent liaison offices in the community. Each village has one 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. TFM's community grievance system is also operated by members of the Community Liaison department. All community members, including TFM employees, may present grievances related to the impacts of our operations in the DRC.

In 2020, while preparing the *Scope Statement for Community Development*, TFM consulted all communities within the concession area with guidance from the Provincial Ministry of Mines and participation from civil society organizations. Under the coordination of the Bureau Diocésain de Développement (BDD) and Southern Africa Resources Watch (SARW), nearly 500 community representatives from Fungurume, Tenke, Nguba, Lukotola, and Tshilongo participated in negotiations that lasted half a year and culminated in the finalization of a budget. The *Scope Statement* concluded by TFM and local communities allocates a total budget of US\$31 million for community development. This will go toward projects covering all aspects of community life, including health and medicine, agriculture, education, and infrastructure, with a view to improving the quality of life of some 400,000 people who live inside the TFM concession.



At our Northparkes mine in Australia, community relations staff continued engagement in 2020 with our stakeholders as identified in the site's *Stakeholder Communications Management Plan*. The Northparkes mine has a Community Consultation Committee that is comprised of local government and community representatives and chaired by an independent representative approved by a regulatory body. In 2020, the Community Consultation Committee convened two meetings, the minutes for which are available on the mine's website. NPM also maintains dedicated grievance system, residents of the community can provide feedback via phone, email, text message, and social networks.

Our Brazilian operations continue to value and maintain dialog with various stakeholders. External stakeholders in Brazil can contact the company through a range of channels, including the company website, social media, telephone, and email. The company also provides a dedicated grievance portal called "Hello CMOC". Submissions made through the portal are reviewed by staff in the social department for content and priority according to site policies that define procedures for timely response. The company attends meetings of the Cubatão Consultative Community Council and liaises with government departments in

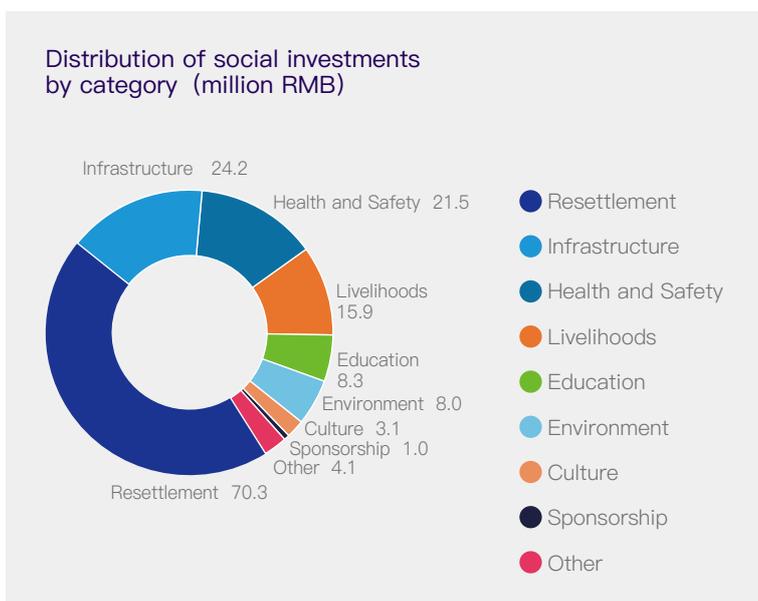
Catalão and Ouvidor on a regular basis. In 2020, following the social diagnosis of community expectations, CMOC Brasil identified the need to enhance its relationship with the rural communities, and took the following actions: improving communication with rural communities, reviewing grievance procedures, and enhancing communication with operations and project teams to mitigate the potential environmental impact of operations on communities. The community team also stepped up home visits and telephone calls to nearby residents.



CMOC Brasil’s community team tracks and follows up on all complaints to mitigate the impact of operations and maintain a good relationship with the community.

Community development

CMOC’s investment approach is based on priority community needs and includes direct investment, contributions to community foundations, and participation in government as well as private sector-led initiatives. Our community investments are also centered around the United Nations Sustainable Development Goals (SDGs), specifically Goal 1: No Poverty; Goal 2: Zero Hunger; Goal 3: Good Health and Well-Being; Goal 4: Quality Education; Goal 6: Clean Water and Sanitation; Goal 8: Decent Work and Economic Growth; and Goal 9: Industry, Innovation and Infrastructure. Investments are typically made in the broad categories of education, health, economic development, infrastructure, and resettlement. Overall, CMOC invested RMB 156.4 million in community projects in 2020.



Education

Support for education from primary school through to university is a high priority for stakeholder communities. In 2020, across all operations the company donated over RMB 8.3 million to educational programs.

In China, the company believes that educational problems should be addressed first to promote regional development. In 2020, we made donations in Luanchuan County to help new university students to finish their studies and ensure that students from poor families in Xiaohe Village, Qiuba Township can go to school. We also donated schoolbags, books, basketballs, and other school and sporting goods to children from poor families in Huangtuling Village, Heyu Town to help improve their learning environment.

At TFM, the local community has longstanding concerns about the lack of access to and the quality of basic education available to children in our mining concession area. In 2020, the SCF invested in the construction of four schools to help improve access to basic education. The company also donated 600 sets of tables and chairs to 12 schools, benefiting some 1,200 students. To reduce the impact of Covid-19 lockdowns on education, TFM donated 125,000 exercise books to elementary school pupils within the concession area. In addition, TFM continued to provide scholarships for outstanding students admitted to the Mutoshi technical school, benefiting a total of 72 students over the course of the year.

Our NPM operations continued to provide scholarships annually for indigenous students and those who wish to pursue a technical degree. Our Brazilian operations continued their "Formare" education and training program, which aims to provide basic skills training to young people from disadvantaged socio-economic backgrounds and to help them enter the labor market. This year, 25 young people went through production assistant and industrial processes training courses, and about 50 employees of CMOC Brasil participated as volunteer educators or tutors in their professional practice. Since the inception of the program, a total of 70 young people have received training, and about 150 employees have participated as volunteer tutors.



CMOC China workers donate stationery and sporting goods to children from poor families in Huangtuling Village.



On October 6, 2020, a groundbreaking ceremony was held for the teaching building of Majengo elementary school, which was funded by TFM's Social Community Fund (SCF).



Due to Covid-19, from April 2020, students on the Formare program transitioned to online learning.

Community health and safety

CMOC invested approximately RMB 21.5 million in community-based health projects in 2020, addressing a range of priority needs.

Communities near our TFM operation may suffer from illness and disease due to the lack of access to medical care. Our health support projects help address some very high priorities for the local communities. In 2020, TFM continued to provide basic medicines for local hospitals, as well as treatment kits for cholera, measles and Covid-19. TFM has launched various assistance and support programs to tackle local epidemics. This year, to support the fight against cholera, we held a "WASH" campaign to disinfect 25 villages, benefiting 2,702 families. We also collaborated with the University of Louvain in Belgium to carry out tuberculosis screening in high-risk communities inside the Fungurume health district. In addition, we continued to support the SafeTstop HIV prevention program targeting truck drivers, providing them with free HIV tests and prevention training.

In the DRC, malaria is a major cause of death among children under five years of age. In 2008, TFM began a campaign to spray insecticide inside the homes of families within the concession area. Over the past 12 years, TFM has sprayed nearly 180,000 rooms, or over 80% of the total, benefiting some 280,000 people. Malaria prevalence among school-age children has fallen from 77.1% in 2007 to less than 30% today. This year, we introduced a new insecticide and began a new malaria prevalence survey at the end of 2020.



In 2020, TFM conducted its 12th indoor insecticide spraying campaign to control and prevent the spread of malaria.

In the context of Covid-19, our operations in Brazil launched a campaign to vaccinate against influenza and provide rapid Covid-19 testing in neighboring rural communities to help rural residents unable to travel to cities. The campaign vaccinated 290 people against influenza and tested 413 people for Covid-19 from 15 different rural communities. In addition, CMOC Brasil joined forces with local firefighters to launch the "Together Against Wildfires" campaign, which is designed to raise awareness about wildfires and reduce their incidence in the area. The campaign gained considerable coverage through the use of the #TogetherAgainstWildfires tag on social media, and the company also disseminated educational material and handbooks about wildfire prevention at armed police checkpoints and along federal roads and other busy roads.

Every year, NPM provides funding to the Parkes Sports Grants and Life Education initiative so that every school-age child has access to education about healthy lifestyles.

All of our operations also provided a range of support to their local communities to help fight Covid-19. For more details, see "The Covid-19 Pandemic".

Infrastructure

CMOC believes that infrastructure plays a vital role in the socio-economic development of local communities. Good infrastructure facilitates better development of local economic drivers, allowing the local community to become self-sufficient, and helping to provide a stable workforce for our mining operations. In addition, according to SDGs Goal 9, we should develop quality, reliable, sustainable and resilient infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all. Infrastructure is therefore a priority in our community investment strategy. In 2020, CMOC invested approximately RMB 24.2 million in infrastructure projects.

In China, we donated RMB 20 million to Luanchuan County to assist with infrastructure development in impoverished villages and improve the living conditions of villagers. In addition, in August 2020 we assisted with relief efforts in Xiaohu Village, which experienced its most severe flooding for 50 years, destroying part of the village's roads and bridges. We took rapid action to restore the village's transport infrastructure, donating RMB 300,000 RMB toward the rebuilding of bridges.



CMOC funded the restoration of Lianxin Bridge in Xiaohu Village

At our DRC operations, infrastructure in local communities is poor due to the low level of economic development. With the rapid growth of the local population in recent years, the demand for infrastructure has become more urgent. In 2020, the TFM Social Community Fund invested in road resurfacing projects in the neighboring town of Fungurume, including the paving of 6 km of clay roads and 2 km of asphalt roads. At the New Mitumba resettlement site, the large parking facility funded by TFM was officially completed, which functions as a parking site for trucks traveling along the national road to Kolwezi. The project also includes a bus service station with numerous facilities, including a market, administrative offices, a restroom, and trash cans. In addition to functioning as a rest stop for vehicles, the project also enables local residents to sell their wares at the on-site market.



The New Mitumba parking site is equipped with a wide range of facilities for passing vehicles and pedestrians.

Our Brazil operations have continued their partnership with Catalão City Hall. In addition to our 2019 investments, in 2020 we invested a further R\$3 million in infrastructure projects in health, education, housing, and urban development, including the renovation of hospitals, dental clinics, public squares, public spaces, and public housing.

Economic development and livelihoods

As the majority of our workforce comes from local communities, self-sufficient communities where people's economic needs are met are important for providing a stable workforce and ensuring business continuity. For this reason, a leading issue for all communities near our mine operations is the creation of new opportunities for economic development. Our programs are directed at building capacity to address existing economic drivers, such as agriculture and local business development, including vendor opportunities to the mine itself. Other initiatives focus on creating economic diversification. In 2020, CMOC invested approximately RMB 15.9 million in projects directed towards economic development and the enhancement of livelihoods.

Given that our TFM operation is in an area where agriculture is important to the local economy and to household food security, one of our key areas of developmental support is in the agricultural sector. In 2020, TFM continued its maize credit project, providing training in planting techniques and distributing fertilizers and seeds to 644 farmers. The project now covers 640 hectares of agricultural land. In addition, TFM continued to implement market-oriented vegetable production and animal husbandry projects. This year, vaccinations were given to 16,000 birds at 827 farms, and approximately 70 farmers received goats from TFM and completed goat breeding training.

After conducting socio-economic diagnosis of rural communities in 2019, in 2020 CMOC Brasil launched its "Nossa Terra" program, which provides technical assistance and training and helps rural families to boost their incomes and economic independence by starting their own business. As part of the program, farmers will form a cooperative and supply CMOC Brasil with dairy products, horticultural products, and other agricultural products. The program will benefit approximately 80 families in 4 rural communities. Meanwhile, our Brazilian operations continued to support the weekly "Lá da Roça" market, where local farmers sell their products to our employees. The market helps to boost the incomes of local farmers – approximately 40 farmers have benefited directly through their participation.

NPM's agricultural operations have been running successfully for more than 20 years. NPM owns 10,314 hectares of land in the Central West region of New South Wales, of which mining operations occupy 1,630 hectares. The remainder of the land is used for commercial purposes, agriculture, and logistics. In 2020, NPM planted 1,195 hectares of wheat, 821 hectares of rapeseed, and 330 hectares of chickpeas. Favorable weather conditions throughout the year led to a bumper harvest, which started in November. In addition to generating an additional source of revenue for the company, NPM's agricultural activities create job opportunities and provide fresh agricultural produce for the local community.



In China, CMOC helps local governments with targeted poverty relief measures based on the needs of the local community. For many years, the company has been committed to a poverty relief strategy that aims to increase self-sufficiency and reduce reliance on aid. Examples of such measures include helping residents of Xiaohe Village in Qiubaxiang to build a lotus pond and lotus root processing facilities, plant corn, and build new grape, cherry, and cherry tomato orchards. In 2020, we also built a 3.3 hectare chrysanthemum processing facility and supported the growing market for local specialties and eco-tourism. In order to boost the incomes of farmers in impoverished regions, our employees also visited the village of Huangtuling and purchased local agricultural produce, including 300 kg of persimmon and 50 kg of maize grit. Thanks to these efforts, we have now purchased more than RMB 1 million worth of produce from local communities.

Land acquisition and resettlement

All our mining operations require significant amounts 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 reflect internationally accepted good practice principles of stakeholder consultation and negotiated settlement based on fair market valuation.

In China, continuous mine development may require the acquisition of land owned by residents living in the areas surrounding our operations. We have therefore formulated the *CMOC Implementation Measures for Recruiting Residents impacted by Land Acquisition* and developed land acquisition procedures including consultation, negotiated settlement, and fair compensation. This year, in light of our need to build a tailings storage facility, we liaised with the local government and village committee and signed land use agreements with residents of Sanlian Village in Shizimiao, in which we made provisions for compensating affected residents. The tailings storage facility involved the acquisition of 11.5 hectares of land and 454 hectares of hillside, affecting 65 people. In addition to providing compensation, we also employ local residents affected by our mining activities. In 2020, we employed an additional 60 people under this program, which has provided a stable source of income to a total of more than 1,000 local residents.

At our operations in Australia and Brazil, surrounding land is mainly used for extensive agriculture. In these cases, the need for additional land is met through strategic planning, enabling sufficient lead times for engagement and negotiation with land-owners, and in compliance with well-defined internal and regulatory processes. At our Brazilian site, resettlement follows an internal policy that calls for pre-impact socio-economic analysis including vulnerability assessments that drive subsequent, multi-year monitoring until pre-impact conditions are reestablished. In 2020, there were no cases of land acquisition requiring resettlement at our Australian and Brazilian operations.



TFM's resettlement areas are equipped with hygiene and drinking water facilities, and are supported by multi-year livelihood restoration programs.

At our TFM operation in the DRC, land acquisition is guided by international good practices, notably Performance Standard 5 of the International Finance Corporation (IFC), which helps protect the livelihoods and rights of affected populations that are vulnerable due to poverty and lack of formal title to the lands they occupy. In 2020, TFM's main land acquisition project was the resettlement of 891 households over an area of 1,071 hectares. 887 of these households received economic resettlement in form of compensation, while 4 households were physically resettled in addition to receiving compensation. Since the beginning of its construction in 2006, TFM has relocated 1,182 households, of which 742 households have been relocated to newly built residential areas. An additional 440 households have been assisted with resettlement in Fungurume, Tenke, and other communities. During the 2020 agricultural year, we helped to restore the livelihoods of 2,160 displaced farmers as part of our livelihood restoration program.

As part of our broader social and environmental mitigation plan for TFM, resettlement action plans are an activity with inherent risk, and so the TFM program is subject to external audit on an annual basis, during which performance is evaluated in terms of alignment with internal and external policies, continuous improvement, redress of issues, and overall community acceptance of our resettlement program. In 2020, TFM engaged ERM to conduct an audit of its resettlement program. Due to the restrictions on travel introduced in response to Covid-19, this year's audit was conducted remotely. TFM has formulated an action plan based on the auditor's recommendations.

Human rights

In 2020, CMOC formally implemented its *Human Rights Policy*, which is applicable to the entire group. At the end of 2020, the company engaged a leading international law firm to conduct a review of the policy and the evolving stakeholder expectations, and started the update of this policy based on the results of the review.

In 2020, the group's legal compliance department updated supplier due diligence procedures with added questions on suppliers' human rights policies and practices, including their use of security and armed personnel. At Northparkes, the need for compliance training is identified according to role requirements. All new employees are assessed on their knowledge of the Northparkes code of conduct, which includes elements of anti-discrimination policy. Supervisors receive additional training on the Australian *Fair Work Act*. IXM's *Sustainability Policy* also includes provisions on human rights, especially with regard to suppliers in conflict-affected and high-risk areas, where IXM endeavors to take appropriate measures to implement the due diligence framework outlined in the *OECD Guidance*.

At CMOC Brasil, all employees and contractors have received training in human rights policies. At our Brazilian operations, we employ 65 contract security staff who are primarily responsible for controlling access points. All of these staff are unarmed and have received training in human rights. All contracts at our Brazilian operations include an appendix with provisions on human rights. The company investigates and deals with all human rights violations which are reported to the "Allo CMOC" hotline.

All TFM employees and contractors are required to complete induction training, which includes a module on the company's human rights policy. In addition, all employees and contractors are informed of the complaints hotline and encouraged to report human rights violations immediately. The company has appropriate procedures in place for investigating and dealing with reported violations. Human rights grievance and investigation procedures are also applied to the local community. In 2020, TFM provided human rights training to 5,114 employees and contractors. In addition, human rights provisions are contained in all of TFM's contracts and the TFM *Supplier Code of Conduct*. In 2020, TFM's contract department incorporated a human rights appraisal in its supplier rating system.

In terms of security, all of our operations develop needs-based security solutions in order to prevent unauthorized personnel from entering our mining sites, protect public health and safety, and safeguard the company's assets.

In the copper mining region of southeastern DRC, significant artisanal mining takes place, which also occurs illegally around and within the TFM mine concession. To protect company assets and personnel and to maintain access control for our active operations, TFM employs security agents and private security contractors within its workforce. These agents and private contractors are unarmed, have no law enforcement capacity, and are primarily engaged in surveillance and the operation of access control points.

TFM implements the *Voluntary Principles on Security and Human Rights* (VPSHR), which help guide companies in maintaining the safety and security of their operations while encouraging respect for human rights. TFM provides training to its security staff and to the personnel of private security contractors on key elements of the VPSHR. Private security firms are also subject to due diligence at the contracting stage, including human rights aspects. In 2020, 68.2% of TFM's 186 direct hire security employees and 1,493 private security contractors received VPSHR training. This is lower than in previous years, as some training sessions had to be postponed or canceled as a result of Covid-related quarantine measures.

Enforcement of national mining law within the TFM concession, with reference to the legal extraction of minerals, is the responsibility of the Mines and Hydrocarbons Police (PMH), a branch of the national police. Though autonomous in their operations, the PMH operate under terms of a contract with TFM's security contractor that addresses concerns such as the nature of support provided by TFM. The contract makes explicit reference to TFM adoption of the VPSHR, including directives on how to follow up on allegations of human rights violations. All the PMH officers should receive VPSHR training before being deployed in TFM concession. In 2020, 46 newly stationed police officers received VPSHR at our TFM mining site.

In recent years, due to the massive influx of migrants, TFM and the surrounding communities have been facing the challenge of increasing illegal mining in our concession and adjacent areas. This has led to a sharp deterioration of security in local areas due to rising crime rates and fatal accidents associated with unsafe artisanal mining practices. In June 2019, the DRC government decided to deploy the armed forces in the region to disperse illegal miners and address the problem of crime. At the time of writing, there were still approximately 100 soldiers stationed at the TFM concession and in adjacent areas, mainly in the vicinity of the national road. Fully aware of the potential human rights risks associated with the military deployment, TFM contacted the government and military leaders to communicate its human rights policy, including its adherence to the VPSHR, and requested the distribution and communication of the VPSHR to newly stationed soldiers. TFM does not engage directly with the armed forces, does not participate in any military operations, and does not provide any assistance that can facilitate military operations. In 2020, we did not receive any reports of human rights violations at the mining concession.

As part of its efforts to promote and implement the VPSHR, TFM regularly participates in the meetings of the Lubumbashi VPSHR Working Group, and exchanges information and views with the various stakeholders involved. This working group, composed of government representatives, mining companies and human rights NGOs, aims to facilitate communication among stakeholders, create a climate of mutual trust, and adopt coordinated and participatory solutions to address security and human rights challenges at mining sites. In March 2020, TFM's representatives were invited to attend the World Bank Fragility Forum in Washington D.C., where they presented TFM's security and human rights practices. The company also participated in the consultation process for the updated version of the *Addressing Security and Human Rights Challenges in Complex Environments Toolkit* developed by the International Committee of the Red Cross (ICRC) and the Geneva Center for the Democratic Control of Armed Forces (DCAF).

Product 07

Our mining and processing operations produce refined metal as well as intermediate and final composite products that are essential to the global economy: Molybdenum, tungsten and niobium are mainly used in the metallurgy of superalloys; cobalt primarily in lithium-ion batteries, essential for mobile phone and electric vehicles; copper is widely used in every aspect of our lives, and phosphate fertilizer is an indispensable material for agriculture. Our manufacturing streams also consume other products and services sourced from suppliers and contractors.

IXM sources, finances, and transports concentrates, intermediate products, and refined metals. It is among the top copper, zinc, and lead concentrates merchants and a leading trader of refined copper, zinc, aluminum, cobalt, and nickel. IXM offers flexible short and long-term solutions to producers, consumers, and other affiliates throughout the metals and mining industry in over 60 countries on 6 continents. As one of the world’s largest metal blenders and refiners, IXM offers both short and long-term solutions to blend, store, process, and transport raw materials.

The sourcing, manufacturing, transport, and delivery of all these materials may pose environmental and social risks. We address these risks, as well as those in the upstream and downstream value chain, with policies and procedures at our operating sites.

Materials sourcing

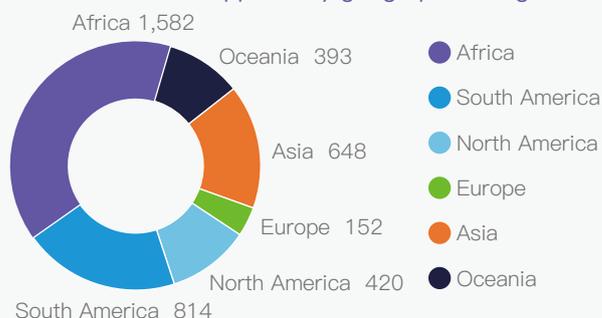
Supply chain management in mining business

We consider environmental and social risks in the company’s supply chain where we need to source input materials and services to support our operations. CMOC’s sustainability policies serve as guidelines for supplier management systems across all operations, covering matters such as health and safety, human rights, anti-corruption, codes of conduct, environmental management, and community relations. In 2020, CMOC and its subsidiaries continued to put these policies into practice.

CMOC headquarters and global supply chain departments have gradually established and improved supply chain management systems. Currently, third-party platforms are used for supplier vetting and due diligence, which includes checks on environmental and ethical compliance. All new suppliers and customers have been informed of CMOC’s *Code of Business Conduct*, anti-corruption policies, and other compliance requirements.

In China we have implemented the *Suppliers Entry Management Guidelines* to ensure that qualified suppliers meet policy and regulatory requirements concerning commercial reputation, required professional expertise, and HSE considerations. We regard a supplier’s environmental and social risks as an important factor in our assessments, motivating those with whom we do business to comply with laws and regulations on environmental protection, employment, and operations. We regularly review and conduct annual evaluations of suppliers and pay special attention to due diligence on suppliers of hazardous chemicals and those with an environmental impact. In 2020, our Chinese business updated its supplier management procedures to include more detailed rules on environmental checks on suppliers.

Total number of suppliers by geographical region ⁽¹⁾



⁽¹⁾ IXM not included.



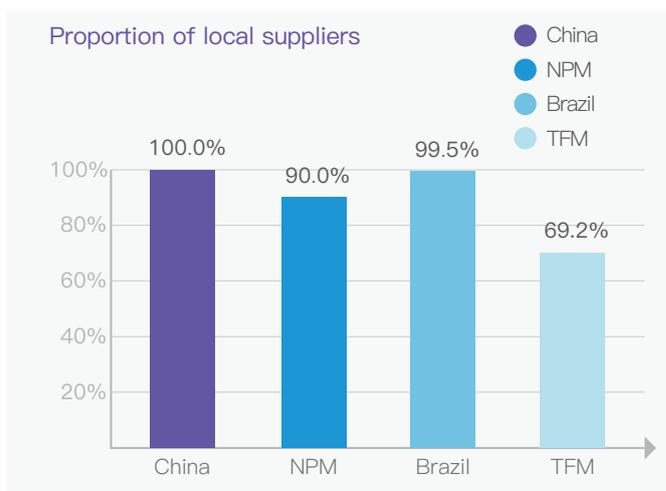
Australia already has robust government laws and regulations to prevent child labor, slavery, corruption, and other social and environmental problems. For this reason, NPM mainly performs environmental and social screening by conducting compliance reviews of suppliers. In addition, tendering procedures must comply with NPM’s *Procurement Policy*, *Commitment Policy*, and *Contracts and Purchasing Procedure*. NPM manages suppliers through contractor management systems, contract performance reviews, and HSE pre-qualification vetting to ensure that they understand and conform to the site’s *Code of Conduct* and HSE requirements.

At our TFM mine in the DRC, human rights and corruption are pivotal areas of concern. As such, we conduct due diligence of suppliers and contractors to screen for violations of applicable laws and CMOC policies dealing with anti-corruption or human rights. During the screening process, a subset of these contractors is subject to site visits during which safety, environmental, and employment policies and programs (and their implementation) are reviewed. With respect to employment practices by contractors, TFM pays special attention to policies pertaining to the legal working age of their employees. The screening phase site visits also provide valuable insights into the practical aspects of equipment, tools, and readiness to perform the proposed scope of work. In 2020, TFM strengthened hierarchical management of on-site contractors and introduced an annual assessment mechanism that tracks HSE performance, human rights, and other social indicators. TFM’s HSE, administrative, and contract management departments conduct joint inspections of on-site contractors and, in the event of compliance violations, record the violations, request corrective action, and follow them up. In addition, CMOC headquarters added a questionnaire to its centralized supplier due diligence platform that covers risk factors from the *OECD Guidance*, such as human rights, corruption, and non-state armed groups.

Our operations in Brazil implement a supply chain policy that assesses supply chain-related environmental risks, contractor environmental performance, safety risks, contractor compliance, and contractor support for local procurement. The supply chain, technical, and sustainability teams of mining operations jointly review and identify contractor proposals that could present material risks. In 2020, our Brazilian operations developed a supplier assessment plan. Under the plan, key contract suppliers are assessed and receive feedback on a monthly basis. These assessments draw on environmental and social performance indicators such as a supplier’s environmental and waste management capabilities and their engagement with

local communities. The plan aims to give public recognition to suppliers with outstanding HSE and social performance. In addition, when vetting suppliers, our Brazilian operations use the Brazilian federal government’s National Registry of Punished Companies (CNEP) and Registry of Ineligible and Suspended Companies (CEIS) to identify whether potential suppliers have a history of corruption, human rights abuses, or other issues.

CMOC encourages the use of local suppliers in its global operations in order to maximize opportunities for local employment and economic development. The following table shows the use of local suppliers in CMOC’s mining operations. The calculation method varies due to socioeconomic factors. For TFM, “local suppliers” means African suppliers; for all other operations, it means domestic suppliers.



Supply chain management in trading business

In our metal trading business, as a global company involved in the flows of metals commodities around the world, IXM recognizes the risks associated with its mineral supply chain, and incorporates ESG factors into its business decisions to reduce risk and meet expectations of its stakeholders.

IXM commits to responsible sourcing and has implemented a *Sustainability Policy* (available on its website www.ixmetals.com) which defines the key principles and the risk management approach that IXM applies globally and that are consistent with the standards set forth in the *OECD Guidance*. Prior to engaging with any supplier, IXM systematically conducts due-diligence using a risk-based approach to identify and assess risks associated with ESG issues including human rights abuses, bribery and corruption, as well as environment, health and safety issues.

IXM further recognizes the requirement for enhanced due-diligence process when sourcing from or transporting through Conflict-Affected and High-Risk Areas (CAHRAs) defined by widespread and systematic violations of international law, including human rights abuses. When sourcing from CAHRAs or when IXM has identified material risks associated with ESG

issues, risk assessment is systematically supported by desktop research, and regularly includes engagement with the supplier, consultation with other stakeholders, and—depending on materiality of potential red flag—on-site visits or independent third-party audit. Initial due diligence is followed by an ongoing monitoring in an effort to mitigate identified risk and track progress in line with *OECD Guidance*.

Even though IXM does not trade in conflict minerals (Gold, Tin, Tantalum, Tungsten), IXM sources material from 2 countries identified as CAHRAs as per European Commission Regulation (EU) 2017/821, namely the DRC and Eritrea. In 2020, IXM originated 12% of its annual turnover from the DRC (of which 74% was sourced from CMOC’s TFM mine which is covered in more details in this report) and less than 0.1% from Eritrea.

Product stewardship

Management systems at our international sites dealing with product stewardship address the quality, compliance, and sustainability risks associated with our products and processes, including occupational health and safety, environmental management, quality control/quality assurance, 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.

In the DRC, our product assurance is largely driven by compliance needs derived from international trade, transport, and material classification schemes of the countries and regional associations through which product is transported and consumed, with special regard to cobalt hydroxide. The Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) regulation of the European Union, for example, addresses the production and use of chemical substances and their potential impacts on both human health and the environment. REACH requirements directly drive the classification and labeling processes of our cobalt hydroxide, which also considers the requirements of up to 12 additional countries that may be involved, in the transport and final disposal of our product.

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. The 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. These procedures include specific actions to dispose of illegally mined ore confiscated by government authorities within the TFM concessions. 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. CMOC has no tolerance for child labor or forced labor, employing only people who have reached the legal working age. In 2020, we found no violation of any laws or regulations regarding child or forced labor.



With respect to illegally mined ore confiscated by Mines Police within the TFM concession, TFM has a comprehensive set of procedures for storing, reporting, and periodically burying ore in waste rock piles under government supervision. Such procedures ensure that illegally mined ore is not included in TFM’s product.

Due to the importance of monitoring and maintaining these procedures while managing TFM’s mineral supply chain, TFM again received independent assurance of the company’s product control and custody procedures for the 2020 period (see “Assurance Statements”). In addition, in order to meet the evolving expectations of international stakeholders for a responsible cobalt supply chain, in 2020 TFM conducted a self-evaluation against the *OECD Due Diligence Guidance on Conflict Affected and High-Risk Areas (OECD Guidance)* and Responsible Minerals Initiative (RMI)’s Risk Readiness Assessment (RRA). This exercise was reviewed by our assurance consultants and TFM has developed corresponding action plans. Users of this report can contact CMOC’s sustainability team for more details of this self-evaluation.

In 2020, CMOC retained its membership in the Cobalt Institute (CI), an industry-led trade association that promotes sustainable and responsible production and use of cobalt, and participated in sustainability-related initiatives and industry research with this organization. In 2020, CMOC continued to apply the Cobalt Industry Responsible Assessment Framework (CIRAF) to manage nine areas of significant risk in cobalt production. Further commitment is required to implement one or more of a suite of external standards appropriate to all of these risks. In each risk category there are several options presented for standards, from which companies can select one or more that are appropriate for their operations. The following table identifies the CIRAF external standards, disaggregated by those that TFM has chosen to apply either as primary drivers of risk management at the site, or as guidance for additional alignment. The table further identifies the other standards offered by CIRAF with which TFM is materially aligned.

Table: CIRAF framework applied by TFM

✓ Standard that drives action ○ Deliberate alignment ● Material alignment

CIRAF Risk Categories→		Env. Air/Water	Biodiversity	OH&S	Corruption	Security & Human Rights	Child Labor	ASM	Livelihoods	Resettlement
Specific CIRAF Standards Applied at TFM	ICMM 10 Sustainable Development Principles	✓	✓	✓	✓	✓	✓	✓	✓	✓
	GRI Standards and MMS	○		○	○	○	○	○	○	○
	Voluntary Principles on Security & Human Rights					○				
	United Nations Guiding Principles					○				
	National Compliance Framework	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Extractive Industries Transparency Initiative				○					
	IFC-PS	○	○			○	○		○	✓
	OECD Due Diligence Guidance (OECD-DDG)				○	○	○	○		
	Risk Readiness Alignment (RRA)	○	○	○	○	○	○	○		○
	ISO 45001			✓						
	ISO 14001	✓								
TFM alignment with other CIRAF Standards	UN Global Compact (UNGC)	●		●	●	●				●
	Towards Sustainable Mining (TSM)	●	●	●	●	●	●	●	●	●
	Initiative for Resp. Mining Assurance (IRMA)	●	●	●	●	●	●	●	●	●
	Corporate Human Rights Benchmarks (CHRB)					●				

In addition, we strongly believe that higher transparency along the value chain will increase the sustainability of the cobalt supply, essential for the battery industry. Therefore, CMOC and its trading platform IXM joined Glencore, ERG and Umicore in the Re|Source consortium. Re|Source is developing an industry-wide blockchain platform to trace the origins of the raw materials and track them along the entire battery value chain.

At our operations in China, quality and safety issues related to our products are driven by various national regulations, as well as the ISO 9001 Quality Management System scheme, under which the Sandaozhuang mine is certified. In addition, as tungsten is covered by regulations related to “conflict minerals” in the United States and the European Union, in 2020 CMOC tungsten operation has been audited against the Responsible Minerals Assurance Process (RMAP) of the RMI. At the time of writing, our tungsten company was on the list of RMAP active tungsten smelters.

At our operations in Brazil, procedures are in place to manage health, safety, environmental, and quality risks associated with a suite of 28 distinct phosphate products consumed domestically, as well as ferroniobium products that are exported. The Brazil operations are also certified to ISO 9001 quality standards.

The Northparkes operation completed its life cycle assessment in 2018, which led to an update of the site’s Product Stewardship Risk Assessment relative to the dangerous and hazardous goods classification of our copper concentrate. During 2020 the Product Stewardship Risk Assessment was reviewed by the Logistics and Environmental Teams and incorporated into the Environmental Aspects and Impacts Register.

In 2020, IXM completed its registration under the European Union’s regulation for the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH). In terms of product quality, IXM’s 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.

No breaches linked to our products in terms of health and safety, environment, labeling, or social matters were reported in 2020 that resulted in impacts to CMOC.

Business ethics and transparency

CMOC is committed to a high level of business ethics practices. We affirm our commitment to act with integrity at all times and to respect the laws and regulations of wherever we do business. In 2020, CMOC implemented its *Code of Business Conduct* and *Anti-Corruption Policy* with application to the entire group, and started the development of an *Anti-Money Laundering Policy*. 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 annually trains employees and suppliers to abide by international and local laws and regulations that forbid bribery of government officials and others, including the *United States Foreign Corrupt Practices Act*, the *China Anti-Corruption Law*, and the *United Kingdom Bribery Act*. Training is mandatory for all CMOC employees deemed as occupying positions having potential for corruption risk. In 2020, due to Covid-19, CMOC delivered its anti-corruption and *Code of Business Conduct* training courses online. The training courses were attended by 104 personnel from CMOC headquarters, 123 from IXM, 29 from our Australian operations, 224 from our DRC operations, 111 from our China operations, and 364 from our Brazil operations². Employees, contractors, and other stakeholders across our operations have access to CMOC's whistle-blower channel and site-level grievance systems to report any suspected cases of bribery or corruption. In March 2021, under the coordination of the Legal and Compliance Department, the senior executives of the Group also received anti-corruption training provided by a renowned international legal firm.



Senior executives of the Group attend anti-corruption training

In China, we have set up a dedicated disciplinary inspection department to carry out internal supervision and inspection on various ethical matters inside the company in accordance with our corporate regulations. In 2020, our China operations conducted a 7-month-long campaign to promote business integrity and legal knowledge. This included organizing online screenings of educational videos to instill values of integrity and self-discipline in employees and raise their compliance awareness. We also stepped up publicity of our grievance channels to encourage supervision and reporting.

At NPM, the *Business Integrity Policy* prohibits bribery and corruption in all their forms, while the *Code of Conduct* sets out provisions for the acceptance of gifts by employees, contractors, the leadership, and managers, as well as specific provisions for fraud and misconduct.

CMOC Brasil's operations follow an internal compliance manual and adhere to Brazilian laws as well as their international equivalents. Every year, the Governance Department organizes integrity training to strengthen the promotion and implementation of the company's integrity policy. Employees must complete the training and pass a test to demonstrate that they have an understanding of integrity-related issues. In 2020, a total of 859 personnel attended integrity policy training, of which 650 were employees and 209 contractors.

TFM's *Facilitation Payment Policy and Bribery and Extortion Policy* clearly defines rules for the acceptance of gifts, dining and entertainment, charitable donations, and direct support for government officials. In addition, TFM continues to be a member of the Extractive Industry Transparency Initiative (EITI) at the country level, and continues to disclose payments to the national treasury and government on a quarterly basis. A TFM representative is a member of the National Committee for EITI-DRC, which represents industry concerns, participates in EITI reporting projects, and coordinates the preparation and submission of disclosures regarding TFM payments to the national treasury and other government entities on an annual basis.

In 2020, CMOC's Legal and Compliance Department received no reports of corruption, bribery, blackmail, fraud, or money laundering, nor were any lawsuits related to such behavior filed against the company.

Data Overview

EMPLOYMENT	2020	2019	2018	2017
Total number of employees	10,956	10,850	10,900	11,226
Total number of contractors	10,684	8,048	7,686	
Number of employees and contractors by gender				
Female	3,025	2,838	2,971	
Male	18,615	16,060	15,615	
Number of employees and contractors by age				
Under 30 years old	3,760			
30~50 years old	14,574			
Over 50 years old	3,306			
Number of employees and contractors by region				
China	6,368			
Australia	467			
Brazil	3,880			
DRC	10,541			
IXM	384			
Turnover rate				
Turnover rate of employees and contractors	24.2%			
Turnover rate of employees and contractors by gender				
Female	9.3%			
Male	26.6%			
Turnover rate of employees and contractors by age				
Under 30 years old	16.4%			
30~50 years old	19.7%			
Over 50 years old	6.9%			
Turnover rate of employees and contractors by region				
China	3.8%			
Australia	14.8%			
Brazil	32.1%			
DRC	37.2%			
IXM	12.0%			

SAFETY	2020	2019	2018	2017
Fatalities	2	0	3	1
Total recordable injuries	52	70	60	58
TRIR	1.25	1.62	1.39	
Total lost time injuries	12	14		
LRIR	0.29	0.32		

TRAINING	2020	2019	2018	2017
Rate of employees and contractors trained	91.4%			
Rate of employees and contractors trained by gender				
Female	86.0%			
Male	92.3%			
Rate of employees and contractors trained by job category				
Senior management	60.3%			
Middle management	84.0%			
Staff	91.9%			
Training hours				
Training hours of employees and contractors	28.8			
Training hours of employees and contractors by gender				
Female	13.1			
Male	31.4			
Training hours of employees and contractors by job category				
Senior management	13.0			
Middle management	57.2			
Staff	27.6			

EMISSIONS AND DISCHARGES	2020	2019	2018	2017
Total greenhouse gas emissions (thousand tonnes)	1,030	970	980	990
Intensity of total GHG emissions (tonnes per tonne of processed ore)	0.025			
GHG emissions– scope1	530	480	470	500
GHG emissions– scope2	500	490	510	490
Total NOx emissions (thousand tonnes)	1.8	1.5	1.9	1.2
Total SOx emissions (thousand tonnes)	2.4	3.0	3.5	3.6
Total PM emissions (thousand tonnes)	5.4	4.4 ^[1]	4.8 ^[1]	4.9 ^[1]
Total emissions of hazardous waste (thousand tonnes)	7.0	7.0 ^[2]	4.0	5.2
Intensity of hazardous waste (tonnes per tonne of processed ore)	1.667x10 ⁻⁴			
Total emissions of non-hazardous waste (thousand tonnes)	19.0	16.0	11.4	15.3
Intensity of non-hazardous waste (tonnes per tonne of processed ore)	4.524x10 ⁻⁴			
Total amount of tailings and waste rock (million tonnes)	150.0	136.0	116.0	120.0
Waste rocks	111.0	98.0	78.0	82.0
Tailings	39.0	38.0	38.0	38.0

WATER CONSUMPTION	2020	2019	2018	2017
Total water consumption (million cubic meters)	128.0	128.0 ^[3]	127.0 ^[3]	121.0 ^[3]
Intensity of water consumption (cubic meters per tonne of processed ore)	3.048			

ENERGY CONSUMPTION	2020	2019	2018	2017
Total energy consumption (MWh)	3,290,000	3,170,000	3,080,000	2,874,000
Intensity of energy consumption (MWh per tonne of processed ore)	0.078			

COMMUNITY INVESTMENT	2020	2019	2018	2017
Total (RMB millions)	156.4	207.5	308.4	166.2

SUPPLY CHAIN MANAGEMENT	2020	2019	2018	2017
Total number of suppliers	4,009			
Number of suppliers by region				
Asia	648			
Africa	1,582			
South America	814			
North America	420			
Europe	152			
Oceania	393			

Note:

[1] The PM emissions in 2017, 2018 and 2019 have been restated to reflect actual situation.

[2] The emissions of hazardous waste in 2019 have been restated to reflect actual situation.

[3] The water consumption in 2017, 2018 and 2019 have been readjusted to give more accuracy.

Standards and methodologies used in calculation:

1、Greenhouse gases include carbon dioxide, methane, nitrous oxide 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, the *Greenhouse Gas Equivalencies Calculator* issued by the U.S. Environmental Protection Agency, the *National Greenhouse and Energy Reporting Scheme* issued by the Australian Department of Environment and Energy, and 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 CO2 emission factors of China’s regional power grids published by the National Development and Reform Commission of China, *the National Greenhouse and Energy Reporting Scheme* published by the Australian Department of Environment and Energy, and the average CO2 emission factors published by the Brazilian Ministry of Science, Technology, Innovation and Communication.

2、NOx、SOx、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 Australia and 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 provided by the *National Greenhouse and Energy Reporting Scheme* issued by the Australian Department of Environment and Energy and those issued by the International Energy Agency.

Index I —ESG Content Index

HKEX ESG Reporting Guide	Description	Location/Remarks
A.Environment		
Aspect A1 Emission		
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	Greenhouse gas emissions in total (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 measures to mitigate emissions and results achieved	Environment
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved	Environment
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials	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 initiatives and results achieved	Environment
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved	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.
Aspect A3: The Environment and Natural Resources		
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.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	Employees
KPI B2.2	Lost days due to work injury	Not mentioned: this is not a material issue for CMOC.
KPI B2.3	Description of occupational health and safety measures adopted, how implemented and monitored	Employees
Aspect B3: Development and Training		
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
Aspect B4: Labour Standards		
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
Aspect B5: Supply Chain Management		
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

Aspect B6: Product Responsibility		
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.
Aspect B7: Anti-corruption		
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
Aspect B8: Community		
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

Index II—GRI Content Index

GRI Standard Title	Description	Location/Remarks
GRI 100: Universal Standards		
GRI 102: General Disclosures		
Organizational Profile		
102-1	Name of the organization	About this Report
102-2	Activities, brands, products, and services	About CMOC
102-3	Location of headquarters	About CMOC
102-4	Location of operations	About CMOC
102-5	Ownership and legal form	About CMOC
102-6	Markets served	About CMOC
102-7	Scale of the organization	About CMOC
102-8	Information on employees and other workers	About CMOC, Employees
102-9	Supply chain	About CMOC, Product
102-10	Significant changes to the organization and its supply chain	About CMOC, Product
102-11	Precautionary Principle or approach	Management Approach, Environment, Community, Employees
102-12	External initiatives	About CMOC
102-13	Membership of associations	About CMOC
Strategy		
102-14	Statement from senior decision-maker	Message from the Chairman
Ethics and Integrity		
102-16	Values, principles, standards, and norms of behavior	Management Approach
Governance		
102-18	Governance structure	Management Approach
Stakeholder Engagement		
102-40	List of stakeholder groups	Management Approach, Community
102-41	Collective bargaining agreements	Management Approach, Employees
102-42	Identifying and selecting stakeholders	Management Approach
102-43	Approach to stakeholder engagement	Management Approach
102-44	Key topics and concerns raised	Management Approach
Reporting practice		
102-45	Entities included in the consolidated financial statements	CMOC Annual Report 2020 About CMOC
102-46	Defining report content and topic Boundaries	About this Report
102-47	List of material topics	Management Approach
102-48	Restatements of information	About CMOC
102-49	Changes in reporting	About this Report
102-50	Reporting period	About this Report
102-51	Date of most recent report	March 23, 2021
102-52	Reporting cycle	About this Report
102-53	Contact point for questions regarding the report	Board Secretary's Office
102-54	Claims of reporting in accordance with the GRI Standards	About this Report
102-55	GRI content index	Index II
102-56	External assurance	Management Approach Assurance statement

GRI 200: Economic		
GRI 103: Management Approach		
103-1	Explanation of the material topic and its Boundary	Management Approach
103-2	Management approach and its components	Management Approach
103-3	Evaluation of management approach	Management Approach
GRI 201: Economic Value Generated and Distributed		
201-1	Direct economic value generated and distributed	About CMOC
GRI 203: Indirect Economic Impacts		
203-1	Infrastructure investments and services supported	Community
GRI 205: Anti-corruption		
205-3	Confirmed incidents of corruption and actions taken	N/A Products

GRI 300: Environment		
GRI 103: Management Approach		
103-1	Explanation of the material topic and its Boundary	Management Approach Environment
103-2	The management approach and its components	Management Approach Environment
103-3	Evaluation of the management approach	Management Approach Environment
GRI 301: Materials		
301-1	Materials used by weight or volume	Not mentioned: this is not a material issue for CMOC.
GRI 302: Energy		
302-1	Energy consumption within the organization	Environment
GRI 303: Water		
303-1	Water withdrawal by source	Environment
303-3	Water recycled and reused	Environment
GRI 304: Biodiversity		
304-2	Significant impacts of activities, products, and services on biodiversity	Environment
GRI 305: Emissions		
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: Effluents and Waste		
306-2	Waste by type and disposal method	Environment
GRI 307: Environmental Compliance		
307-1	Non-compliance with environmental laws and regulations	Environment
GRI 308: Supplier-Environmental-Assessment		
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 103: Management Approach		
103-1	Explanation of the material topic and its Boundary	Management Approach, Employees, Community, Product
103-2	Management approach and its components	Management Approach, Employees, Community, Product
103-3	Evaluation of management approach	Management Approach, Employees, Community, Product
GRI 402: Labor Management Relations		
402-1	Minimal notices regarding operational changes	Employees
GRI 403: Occupational Health and Safety		
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Employees
GRI 404: Training and Education		
404-2	Programs for upgrading employee skills and transition assistance programs	Employees
GRI 407: Freedom of Association and Collective Bargaining		
407-1	Operations and suppliers where the right to freedom of association and collective bargaining may be at risk	Employees
GRI 408: Child Labor		
408-1	Operations and suppliers at significant risk for incidents of child labor	Employees Product
GRI 409: Forced or Compulsory Labor		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employees Product
GRI 410: Security Practices		
410-1	Security personnel trained in human rights policies or procedures	Community, Product
GRI 412: Human Rights Assessment		
412-1	Operations that have been subject to human rights reviews or impact assessments	Community
GRI 413: Local Communities		
413-1	Operations with local community engagement, impact assessments, and development programs	Community
GRI 414: Supplier Social Assessment		
414-1	New suppliers screened using social criteria	Product
414-2	Negative social impacts in supply chain and actions taken	Product
GRI 416: Customer Health and Safety		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Product
GRI 417: Marketing and Labeling		
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), OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas Annex 1 and 2 (OECD DD) and the 10 Sustainable Development Principles of the International Council on Mining and Metals. 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, in 2020 TFM received independent assurance of the company’s product control and custody procedures.’

Our approach involved

- Videoconference interviews with relevant personnel at the site because of COVID19 travel constraints;
- Review of procedures in place at the operation for control, custody and tracking of product and for implementation of the RRA, OECD DD and 10 Sustainable Development Principles; 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)

corporateINTEGRITY

ASSURANCE STATEMENT

The CMOC Environmental Social and Governance (ESG) Report for 2020 has been prepared by the management of China Molybdenum Co. Ltd. (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 international operations in relation to CMOC's commitment to align with International Council of Mining and Metals (ICMM) principles for Sustainable Development (SD), and ICMM Position Statements. The operations covered by this review were:
 - TFM operations in the Democratic Republic of Congo;
 - TNorthparkes operations in Australia; and
 - Niobras and Copebras operations in Brazil.
2. A review of statements in relation to the above operations made in the CMOC ESG Report covering the 2020 reporting year including reporting against Global Reporting Initiative (GRI) Standards.

This included corporate activities relating to the above sites only. All other operations in China and all IXM operations were excluded from scope.

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 international operations are not in alignment with the ICMM principles for sustainable development in the mining and metals industry and ICMM Position Statements.
- That the information reported relating to the international operations in the CMOC ESG Report for 2020 and the related GRI disclosures have been materially mis-stated.

Methodology

The assurance process involved selective reviews of documents, interviews with site personnel and corporate personnel. It focused specifically on:

1. A review of CMOC policies and their alignment to ICMM's 10 SD principles and ICMM Position Statements.
2. A review of processes in place to identify and prioritise SD risks and opportunities during the reporting period, and the results of that process.
3. A review of the systems and approaches that CMOC is using to manage its identified material SD risks and opportunities and to implement ICMM's 10 SD principles.
4. A review of statements and assertions made in the CMOC ESG Report for 2020.

Because of COVID19 travel restrictions, all activities were undertaken via document review and videoconference or telephone interview only.

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 CMOC. Where such information was 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. 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)

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