



中国十五冶
15MCC



2024

Sustainability Report

可持续发展报告

15MCC AFRICA CONSTRUCTION AND TRADING CO., LTD
十五冶非洲建筑贸易有限公司

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About this Report

关于本报告

This is the first Sustainability Report (the "Report") released by 15MCC Africa Company and is intended to communicate the Company's sustainability philosophy and initiatives. It addresses key environmental, social, and governance (the "ESG") issues of concern to stakeholders, outlines the Company's corporate social responsibility efforts, and highlights progress and performance in advancing sustainable development across economic, environmental, and social dimensions.

Definitions 称谓说明

- In the Report
- "15MCC Africa Company", "the Company", and "we" all refer to 15MCC Africa Construction and Trading Co., Ltd;
 - "China 15MCC" and "15MCC" both refer to China 15th Metallurgical Construction Group Co., Ltd;
 - "CNMC" and the "Group" both refer to China Nonferrous Metal Mining (Group) Co., Ltd.

Reporting Guidelines 编制依据

- Global Reporting Initiative *Sustainable Reporting Standards* (GRI Standards)
- Ten Principles of the United Nations Global Compact (UNGC)
- United Nations Sustainable Development Goals (SDGs)
- ISO 26000: Guidance on Social Responsibility (2010)* of the International Organization for Standardization
- Guiding Opinions on Central State-Owned Enterprises Fulfilling Social Responsibilities* and *Guiding Opinions on Enhancing the Fulfillment of Social Responsibilities by State-Owned Enterprises* issued by the State-owned Assets Supervision and Administration Commission of the State Council ("SASAC")
- The *Reference Indicator System for ESG Special Report of Listed Companies Controlled by Central Enterprises* and *ESG Special Report Reference Template for Listed Companies Controlled by Central Enterprises* issued by the SASAC
- Guidance on Sustainable Infrastructure Projects by Chinese International Contractors (Draft for Comments)* and *Specification for Sustainable Infrastructure Projects by Chinese International Contractors (Draft for Comments)* issued by the Department of Foreign Investment and Economic Cooperation of the Ministry of Commerce of the People's Republic of China
- General Framework of the Sustainability Reporting Guidelines for Chinese Enterprises (CASS-ESG 6.0)* issued by the Chinese Enterprise Reform and Development Society
- Guidelines on the Responsibility Management for Chinese Industrial Enterprises (2015 Edition)* by the China Federation of Industrial Economics

本可持续发展报告是十五冶非洲公司欣然发布的第一份可持续发展报告（“本报告”），旨在汇报本公司的可持续发展理念与举措，并对利益相关方重点关注的环境、社会及治理（“ESG”）事宜作出回应，展示本公司的履行企业社会责任情况以及在经济、环境和社会等范畴的可持续发展进展与绩效。

本报告中

- “十五冶非洲公司”“本公司”“我们”均指代十五冶非洲建筑贸易有限公司；
- “中国十五冶”“十五冶”均指代中国十五冶金建设集团有限公司；
- “中国有色集团”“集团”均指代中国有色矿业集团有限公司。

Time Scope 时间范围

The Report covers the period from January 1, 2024, to December 31, 2024 (the "Reporting Period"), with some content appropriately traced back to previous years or extended.

本报告时间范围为 2024 年 1 月 1 日至 12 月 31 日（“报告期”），部分内容适当追溯以往年份或有所延伸。

Reporting Scope 报告范围

The Report covers 15MCC Africa Company. 本报告涵盖十五冶非洲公司。

Reporting Period 报告周期

This is an annual report. 本报告为年度报告。

Data Source 信息来源

The data and information presented in the Report have been sourced from official documents, original ledgers, and statistical reports within 15MCC Africa Company, as well as ESG related data collected, summarized, and audited by the Company. Unless otherwise noted, the financial data in the Report is dominated in RMB.

本报告的数据来源于十五冶非洲公司内部正式文件、原始台账及统计报告，以及经由本公司统计、汇总与审核的 ESG 相关数据。除另有注明外，本报告采用的货币均为人民币。

Report Access 报告获取

The Report is published in Chinese and English versions. In case of any discrepancies, the Chinese version shall prevail. You can visit the Company's website (<http://www.cn15mcc.com>) to browse or download the Report.

本报告采用电子版形式发布，报告语言为中文及英文两种。若对两种文本的理解上发生歧义，请以中文版本为准。您可访问中国十五冶官网 <http://www.cn15mcc.com> 阅读或者下载本报告。

Contact Us 联系方式

If you have any questions regarding the content of the Report or the Company's ESG efforts, please feel free to contact us if you have any questions through the following contact information.

如对本报告的内容或本公司 ESG 工作有疑问，可通过以下联系方式联系本公司：

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A Letter to Stakeholders

致利益相关方的一封信

In 2024, the Republic of Zambia and the People's Republic of China celebrated the 60th anniversary of diplomatic relations and the 11th year of high-quality cooperation under the "Belt and Road" Initiative. As a key presence of 15MCC in the Zambian market, 15MCC Africa Company adheres to the principle of "extensive consultation, joint contribution, and shared benefits" and is deeply engaged in Zambia's economic and social development, building a bridge for Zambia-China cooperation in infrastructure development, mineral resource exploration, and integrated resource development. Over the years, we have established strong roots in Zambia, using our engineering capabilities as a bridge and leveraging advanced technology and international management expertise. Beyond delivering durable, high-quality infrastructure projects, we have embedded green development, social responsibility, and the UN Sustainable Development Goals into our operations. With sustainable governance at the heart of our approach, we are committed to promoting sustainability across four key areas: quality, environment, employee, and community.

2024 年是中国和赞比亚建交 60 周年，也是“一带一路”倡议高质量共建的 11 周年。十五冶非洲公司作为中国十五冶扎根赞比亚市场的重要力量，以“共商共建共享”原则为导向，深度融入赞比亚经济社会发展脉络，在设施建设、矿产开发、资源协同发展中架起中赞合作的桥梁。多年来，我们深耕赞比亚，以工程技术为纽带，依托成熟技术体系与国际化管理经验，不仅筑造了经得起时间检验的精品工程项目，更将绿色发展理念、社会责任担当与可持续发展目标融入企业基因，以可持续管治为核心，促进质量、环境、员工和社区四个维度的可持续发展。

Governance

治理方面

We take compliance as the cornerstone of our operations, continuously strengthening risk management, fostering a culture of integrity, and reinforcing anti-corruption efforts. At the same time, we have deepened our ESG management practices by maintaining open and two-way communication with stakeholders, identifying and assessing material topics, and effectively advancing our sustainability efforts.

我们以合规经营为基石，强化风险管理，持续加强廉洁文化建设和反腐败工作，并且深化 ESG 管理，与利益相关方保持双向、畅通的沟通，识别及评估实质性议题，有效推进可持续发展工作。

Quality

质量方面

Quality is the cornerstone of our Company. We have established a sound quality management system and mechanisms to continuously improve project standards and customer service. Key projects such as the 150,000-ton-per-year Blister Copper Smelting Plant in Chambishi, Zambia and the No. 20 and No. 28 Shaft Pumping and Drainage Project in Luanshya have delivered strong economic, environmental, and social benefits, earning broad recognition from stakeholders. Through a robust emergency response system and well-defined safety protocols, we ensure effective implementation of emergency preparedness and workplace safety responsibilities. We also continue to drive technological innovation, enhance our R&D innovation capabilities, and strengthen the momentum behind our sustainable growth.

质量是我们的立企之本。我们建立健全质量管理体系及机制，全面提升项目质量以及客户服务水平，完成谦比希 15 万吨 / 年粗铜冶炼厂、卢安夏 20 及 28 号竖井区域抽排水项目等多项具有经济、环境和社会效益的项目，获得社会各界的认可；透过完善的应急保障管理制度及措施，切实落实应急保障和安全生产责任；深化技术创新，提升研发创新能力，增强企业发展驱动力。

Environment

环境方面

We are committed to green development, continuously improving our safety and environmental protection systems, and ecological management mechanisms. We strictly control pollutant emissions and promote cleaner, more sustainable production practices while striving to enhance resource and energy efficiency. By undertaking key energy infrastructure projects such as substations, we help improve energy stability and reliability for local enterprises. In alignment with global efforts to combat climate change, we actively implement low-carbon strategies, pursue energy conservation and emissions reduction, and take concrete actions to protect the ecological environment, working together to build a greener, more sustainable future.

我们践行绿色发展理念，完善安全环保管理体系和生态保护制度，严控污染物排放，并且推进绿色清洁生产，锐意提升资源及能源使用效率；承建变电站等能源基础设施项目，提升当地企业用电用能的稳定性；积极响应全球应对气候变化号召，践行低碳战略及节能减排，并且切实做好生态环境保护工作，共建美丽生态家园。

Employees

员工方面

We uphold the talent philosophy of "maximizing individual potential and putting the right people in the right roles," and continue to strengthen our human resources management system. We have established a comprehensive, compliant employment framework and actively promote localized operations to reinforce local hiring and safeguard employee rights and interests. We are committed to building a robust occupational health and safety network, providing skills development platforms and multiple career growth pathways. These efforts not only ensure a safe and healthy working environment but also foster mutual growth between employees and the Company. Through tangible actions, we care for our people and strive to enhance their sense of well-being and team cohesion.

我们秉持“人尽其才，才尽其用”的人才理念，不断完善人力资源管理体系，建立全流程合规用工保障机制，并且落实属地化运营战略强化属地化用工，保障员工权益；搭建职业健康安全防护网、职业技能提升平台及多通道成长路径，确保健康安全防线的同时，促进员工与企业共同成长，并且以实际行动关怀员工，提升员工幸福感和团队凝聚力。

Community

社区方面

We are committed to building a shared future for humanity by fostering a sustainable ecosystem in collaboration with suppliers and industry partners. As part of our corporate social responsibility, we actively support local development through localized recruitment, livelihood infrastructure projects, technology transfer, and charitable initiatives. These efforts contribute to employment, education, and healthcare in Zambia, as we work hand in hand with the local community to build a harmonious and prosperous society.

我们携手共建人类命运共同体，与供应商、行业合作伙伴共营可持续生态圈，并且履行企业社会责任，通过属地招聘、民生工程、技术转移、爱心慈善等方式，助力当地就业、教育、医疗等领域，与赞比亚人民携手共创和谐繁荣社会。

Looking ahead, we will continue to deepen localized operations, drive green technological innovation, and foster local capabilities to support Zambia's economic and social transformation. We remain committed to contributing more to the building of a Zambia-China community with a shared future.

未来，我们将继续深化属地化运营，推动绿色技术革新，培育本土能力，助力赞比亚经济社会转型，为构建中赞命运共同体贡献更多力量！

About Us

关于本公司

Introduction to 15MCC

中国十五冶简介

Founded in 1953, 15MCC was the earliest engineering construction enterprise "going global". 15MCC is now a wholly-owned subsidiary of CNMC with over 30 wholly-owned, controlling, shareholding subsidiaries and branches. 15MCC possesses the special-grade Engineering Procurement Construction (EPC) qualification for metallurgical construction, the Grade A metallurgical engineering design qualification, the Grade A construction engineering design qualification, seven Grade I EPC qualifications and 21 Grade I specialized contracting qualifications, as well as the economic cooperation and operation qualification with foreign parties. With conventional advantages in mining and smelting, 15MCC has long served steel, petroleum, chemical, energy, power, construction materials, housing construction, municipal engineering and highway industries and provided quality design, consulting, investment, construction, procurement, and operating services to customers.

中国十五冶成立于1953年，是中国有色行业最早“走出去”的工程企业，现为中国有色集团的全资公司，拥有全资、控股、参股和分支机构30多家。中国十五冶拥有冶金施工总承包特级、冶金和建筑工程设计双甲级，以及7个施工总承包一级、21个专业承包一级资质，具有对外经济合作经营资格，在矿山、冶炼领域具有传统优势，长期服务钢铁、石油、化工、能源、电力、建材、房建、市政、公路等领域，为客户提供设计、咨询、投资、建设、采购、运营等优质服务。

Introduction to 15MCC Africa Company

十五冶非洲公司简介

15MCC Africa Company is a wholly-owned subsidiary of 15MCC registered in the Republic of Zambia, officially established in Lusaka, Zambia in August 2007. After years of development, the Company has occupied an important position in the engineering construction and mineral development industry in Zambia, accumulated rich management experience, built a mature localized management team, won the trust of the market with excellent quality, and promoted the sustained and stable development of the Company.

十五冶非洲公司是中国十五冶在赞比亚共和国注册的全资子公司，于2007年8月在赞比亚卢萨卡正式成立。经多年发展，本公司在赞比亚工程建设和矿产开发行业占据了重要地位，积累了丰富的管理经验，构建了成熟的属地化管理团队，以卓越的质量赢得了市场的信赖，推动本公司持续稳定发展。

15MCC has designed or built more than 1,000 engineering projects across China and in more than 30 countries, obtained more than 100 patents, and won more than 300 engineering awards, including the Luban Prize for Construction Projects and the National Quality Project Award. In 2024, it was listed as one of the "Top 250 Global Contractors" by the *American Engineering News Record (ENR)* and ranked 111th.

中国十五冶在全国和30多个国家设计、建设了1,000多个工程项目，拥有专利100多项，获得鲁班奖、国家优质工程奖等工程奖项300多项，并于2024年荣登美国《工程新闻记录》（ENR）“全球最大250家工程承包商”（Top 250 Global Contractors）榜单，位列第111位。



Company Milestone Events 公司大事记

2001

- 15MCC entered the Zambian market by undertaking and completing the Surface Civil Construction Project for the Main West Orebody of the CNMC Chambishi Mine, fulfilling its mine reopening mission.
中国十五冶承建中色谦比希矿主西矿体地表土建工程项目，完成复矿任务，正式进入赞比亚市场

2007

- In February, the groundbreaking ceremony for the 150,000-ton-per-year Blister Copper Smelting Plant in Chambishi, Zambia, was grandly held at the Lusaka International Conference Center in Zambia's capital. The event was jointly officiated by then General Secretary of the Communist Party of China and President Hu Jintao and then Zambian President Levy Mwanawasa. The two heads of state also presided over the unveiling ceremony of the Zambia-China Economic and Trade Cooperation Zone;
2月，赞比亚谦比希 15 万吨 / 年粗铜冶炼厂项目开工典礼在赞比亚首都卢萨卡国际会议中心隆重举行。时任中共中央总书记、国家主席胡锦涛和时任赞比亚总统姆瓦纳瓦萨亲临会场，共同主持了赞比亚——中国经济贸易合作区揭牌仪式暨谦比希粗铜冶炼厂开工典礼；
- In July, then Zambian President Levy Mwanawasa, accompanied by the Chinese Ambassador to Zambia Li Qiangmin, visited the site of the blister copper smelting plant in Chambishi. During the visit, he unveiled the foundation stone plaque to commemorate the start of construction.
7月，时任赞比亚总统姆瓦纳瓦萨在中国驻赞比亚大使李强民的陪同下，到谦比希粗铜冶炼厂现场视察并为工程奠基纪念碑揭牌

2009

- In October, the 150,000-ton-per-year Blister Copper Smelting Plant in Chambishi, Zambia, was awarded the inaugural Overseas Luban Prize for Construction Engineering by China.
10月，赞比亚谦比希 15 万吨 / 年粗铜冶炼厂项目荣获中国首届境外建筑工程鲁班奖

2010

- The Luanshya Mining Project Department was established and entered into a long-term mining contract for the Muliashi project with CNMC Luanshya Copper Mines PLC.
成立卢安夏采矿项目部，与中色卢安夏铜业公司签订穆里亚希长期采矿合同

2014

- Undertook the National School of Medicine project for Zambia's Ministry of Health. The project received high praise from the Ministry and is regarded as one of the outstanding construction projects delivered by a Chinese enterprise in Zambia.
承接赞比亚国家卫生部国家医学院项目。该项目得到了赞比亚卫生部的高度评价，是中资企业在赞比亚施工的优秀项目之一

2016

- Undertook the construction of Zambia's National Affordable Housing Project, which was inspected twice by then Zambian President Edgar Lungu during the course of construction;
承建赞比亚国家保障房项目。期间时任赞比亚总统伦古进行两次视察；
- In October, the steel structure plant was completed and put into operation, with a production capacity of 3,000 tons.
10月，钢结构厂建成并投产，产能为 3,000 吨

2018

- In August, the Southeast Orebody Project of Chambishi Copper Mine in Zambia, the first digitalized mine in Africa constructed by the Company, officially commenced production. Then Zambian President Edgar Lungu attended the commissioning ceremony.
8月，承建的非洲首座数字化矿山——赞比亚谦比希铜矿东南矿体项目正式投产。时任赞比亚总统伦古出席投产典礼

2022

- In March, the Integrated Exploration, Construction, and Processing Project for the Southeast Orebody of Chambishi Copper Mine in Zambia, built by the Company, was awarded the 2020-2021 China Construction Engineering Luban Prize (Overseas Projects);
3月，承建的赞比亚谦比希铜矿东南矿体探建结合采选项目荣获 2020-2021 年度中国建设工程鲁班奖（境外工程）；
- In May, the Muwombashi Mining Project Department was established, successfully taking on the Open-Pit Mining Project for Muwombashi Site of Chambishi Hydrometallurgy Co., Ltd.
5月，穆旺巴希采矿项目部成立，顺利承接谦比希湿法公司穆旺巴希露天采矿项目

2023

- In July, the Luanshya Engineering Project Department was established, successfully taking on the Sino-Zam Vocational College of Science and Technology project;
7月，卢安夏工程项目部成立，顺利承接中赞职业技术学校项目；
- In August, Zambia's Minister of Education, Douglas, attended the handover and ribbon-cutting ceremony for the school project in Gwembe District, Southern Province, which was constructed by the Company;
8月，赞比亚教育部长道格拉斯出席本公司承建的赞比亚南方省格温贝县学校项目移交剪彩仪式；
- In December, the Company secured the contract for the 300,000-ton-per-year Fertilizer Plant Project with United Capital Fertilizer Zambia Company.
12月，承接赞比亚联合资本 30 万吨 / 年化肥厂项目

2024

- In April, the Company entered the underground mining sector by undertaking the No. 20 and No. 28 Shaft Pumping and Drainage Project in Luanshya from CNMC. Zambia's President Hichilema attended the project's pump submersion ceremony;
4月，正式进入地下矿山领域，承接中色卢安夏 20 及 28 号竖井区域抽排水项目。赞比亚总统希奇莱马出席项目水泵下潜仪式；
- In October, the Company carried out localized recruitment activities at Copperbelt University and the Confucius Institute of the University of Zambia.
10月，在赞比亚铜带大学、赞比亚大学孔子学院开展属地化招聘活动；
- In December, the Company secured the Ruida Hydrometallurgy Plant Project under the "F+EPC+O" model and undertook the first contract section of the Katumba Open-pit Mining and Stripping Project for Sinomine Resource Group
12月，以“F+EPC+O”模式承接瑞达湿法冶炼厂项目；承接中矿资源卡通巴露天采剥工程（一标段）



01 | 治理篇

GOVERNANCE

We integrate sustainability into every aspect of our business, building our ESG management system on a foundation of compliance. By establishing a comprehensive governance framework throughout the entire business cycle and maintaining regular engagement mechanisms with stakeholders, we systematically identify and assess material topics. This enables us to develop strategic plans and action initiatives that drive both business and social value, achieving an organic unity of high-quality development and corporate responsibility.

我们将可持续发展基因融入业务全流程，以合规经营为根基，构建 ESG 管理体系。通过完善全周期可持续治理架构、建立利益相关方常态化对话机制，系统识别并评估实质性议题，进而制定战略与行动方案，推动商业价值与社会价值双向赋能，实现高质量发展与责任担当的有机统一。



Compliant Operation

合规运营

The Company is committed to strengthening compliance management by strictly adhering to relevant local laws and regulations in Zambia, including the *Anti-Corruption Act*, the *Mine and Minerals Development Act*, the *Factories Act*, and the *National Council for Construction Act*. It continuously improves its risk prevention and control system to enhance its ability to operate in full legal compliance. In line with 15MCC's *Risk Compliance Manual* and *Risk Database List*, the Company actively implements risk and compliance management practices and fosters a strong culture of compliance throughout the organization. Furthermore, the Company has reinforced the role of legal governance as a primary responsibility by appointing business compliance officers in each department and grassroots unit, clearly defining their responsibilities and reporting procedures in accordance with 15MCC's compliance management policies, ensuring the effective execution of compliance management across the Company.

本公司切实强化合规管理，严格遵守赞比亚《反腐败法》(The Anti-Corruption Act)、《矿山与矿业发展法》(The Mine and Minerals Development Act)、《工厂法》(The Factories Act)、《国家建筑委员会法案》(The National Council for Construction Act)等运营所在地的相关法律法规，持续健全风险防控体系，不断提升依法合规经营管理能力。本公司根据中国十五冶《风险合规手册》《风险数据库清单》等风控合规管理要求，积极实施风控合规管理，培育良好的风控合规管理文化。本公司深化落实法治建设第一责任人职责，依据中国十五冶合规管理相关规定和要求，任命各部门及基层单位业务合规官，明确其职责内容与汇报流程，确保合规管理工作有效落实。



The Company continuously strengthens its integrity culture and anti-corruption efforts by establishing a comprehensive risk prevention and control system that covers critical areas such as bidding, material procurement, and contract execution. It implements a "transparent procurement" mechanism, utilizing an electronic bidding platform to ensure full process traceability, requires suppliers to sign integrity commitment letters, and maintains a database of partners' integrity records. Additionally, the Company has built a "three-in-one" supervision network that integrates internal audit, disciplinary inspection, and third-party independent inspections to ensure every engineering project payment is verifiable. It also promotes "integrity culture into projects" initiatives, regularly organizes anti-commercial bribery training for mid-to-senior management, and provides multilingual reporting channels (hotline/email), maintaining a zero-tolerance policy toward any violations.

本公司持续加强廉洁文化建设和反腐败工作，建立全链条廉洁风险防控体系，覆盖招投标、物资采购、合同履行等关键环节，并且推行“阳光采购”机制，通过电子招标平台实现全流程留痕，要求供应商签署廉洁承诺书，建立合作方廉洁档案库。此外，我们构建“三位一体”监督网络，整合内部审计、纪检监察与第三方独立稽查，确保每笔工程款项可核查，同时开展“廉洁文化进项目”活动，定期组织中高层管理人员参加反商业贿赂培训，设置多语种举报渠道（热线 / 邮箱），对违规行为零容忍。

ESG Management

ESG 管理

The Company firmly adheres to the business philosophy of "shared development with clients, growth with employees, and harmony with society," proactively fulfilling its corporate social responsibility and practicing sustainable development. In accordance with the requirements of 15MCC's *ESG Management Manual* and *ESG Administrative Measures*, the Company advances the construction of its ESG management system. It has progressively established a clear and well-defined ESG governance structure, where each business unit is responsible for developing and implementing ESG plans and improvement measures, ensuring the effective execution of ESG management.

本公司始终坚持“与客户共发展，与员工共成长，与社会共和谐”的经营理念，主动履行企业社会责任，践行可持续发展。我们依据中国十五冶《ESG 工作管理手册》和《ESG 工作管理办法》等制度的要求，推进 ESG 管理体系建设，逐步建成职责分明、层级清晰的 ESG 管理体系，由各业务部门制定并落实 ESG 计划及提升措施，有效落实 ESG 管理工作。

Stakeholder Engagement
利益相关方沟通

The Company is committed to establishing a regular, transparent, and two-way communication mechanism with stakeholders, using a multidimensional communication matrix to identify their needs and expectations in the field of sustainable development. Based on these deep insights, the Company dynamically optimizes its ESG management framework and implements targeted actions with closed-loop management. This creates a virtuous cycle of "information gathering – strategy calibration – practical improvement," continuously enhancing ESG performance and promoting sustainable development.

我们着力构建利益相关方常态化双向透明沟通机制，通过多维沟通矩阵识别各主体在可持续发展领域的诉求与期望。基于深度洞察，我们动态优化 ESG 管理框架，并实施精准施策与闭环管理，形成“信息收集 - 策略校准 - 实践改进”的良性循环，持续提升 ESG 绩效，促进可持续发展。



Assessment of Material Topics

实质性议题评估

To effectively identify and respond to ESG issues of concern to stakeholders, the Company conducts issue identification and assessment based on the principle of "materiality".

Based on the GRI Standards, ESG guidelines issued by relevant African stock exchanges and other domestic and international ESG reporting frameworks, as well as the material topics identified by leading industry peers, the Company has identified and organized a list of potential ESG issues. In assessing material topics, the Company has fully taken into account the nature of its business, strategic development priorities, and the concerns and expectations of its stakeholders, and on this basis, has determined the ESG material topics during the Reporting Period. The materiality assessment focused not only on the potential impact of each issue on the Company and its stakeholders, but also on its broader implications for the economy, the environment, and society at large.

为有针对性地识别并响应利益相关方关注的重要 ESG 议题，本公司围绕“实质性”原则开展议题的识别及评估工作。

我们参考 GRI 标准、非洲相关证券交易所 ESG 指引等国内外 ESG 报告指引，并结合优秀同行企业实质性议题情况，识别并梳理潜在 ESG 议题。我们充分考虑本公司的业务性质、发展策略以及利益相关方的诉求与期望，开展 ESG 实质性议题评估，从而确认报告期内的 ESG 实质性议题。在评估过程中，不仅考虑议题对本公司和利益相关方的影响，同时考虑其对经济、环境和社会的影响。

下表为本公司经识别和评估的 ESG 实质性议题，其将作为本报告的披露重点：
The table below outlines the material ESG topics identified and assessed by the Company, which serve as the primary focus areas for disclosure in the Report:



Topic 专题

Highlight Projects of the "Belt and Road" Initiative “一带一路”亮点项目

2024 marks the 60th anniversary of diplomatic relations between the Republic of Zambia and the People's Republic of China. Against the backdrop of the two countries jointly building a high-level community with a shared future, 15MCC Africa Company has served as a pioneering force in the "Belt and Road" Initiative, with metallurgical construction and mineral development as its strategic pillars. Over the years, the Company has taken deep root in the Zambian market, upholding the principle of high-quality development and transforming Chinese technological capabilities into localized growth momentum. Through a series of landmark projects in mineral resource development and infrastructure construction, 15MCC Africa Company has earned widespread recognition from both the Zambian government and local communities. Its accomplishments have been affirmed with multiple national-level honors, exemplifying the strength of "Chinese construction" and injecting sustained momentum into the "Belt and Road" cooperation.

2024 年适逢中赞建交 60 周年。在两国携手构建高水平命运共同体的时代背景下，十五冶非洲公司作为“一带一路”建设的先锋力量，以冶金建设与矿产开发为战略支点，多年以来一直深耕赞比亚市场。我们秉持高质量发展理念，将中国技术转化为属地发展动能，通过矿产资源综合开发、基础设施建设等系列标杆工程，不仅赢得当地政府与民众的高度认可，更以多项国家级荣誉印证了“中国建造”的实力担当，为共建“一带一路”注入可持续动力。

Projects won the Luban Award for Overseas Engineering 项目荣获境外工程鲁班奖



The 150,000-ton-per-year Blister Copper Smelting Plant Project in Chambishi
谦比希 15 万吨 / 年粗铜冶炼厂项目



The Integrated Exploration, Construction, and Processing Project for the Southeast Orebody of Chambishi Copper Mine in Zambia
谦比希铜矿东南矿区探建结合采选项目工程

No. 20 and No. 28 Shaft Pumping and Drainage Project in Luanshya 卢安夏 20 及 28 号竖井区域抽排水项目

The No. 20 and No. 28 Shaft Pumping and Drainage Project in Luanshya is a landmark initiative jointly undertaken by 15MCC Africa Company and CNMC Luanshya Copper Co., Ltd. The project aims to revive a century-old mine that had been shut down for 24 years due to flooding, leveraging technological innovation to enable resource regeneration and promote sustainable development. Launched in October 2024, the No. 28 Shaft Pumping and drainage Project represents the world's first ultra-large-scale restoration of a deep-flooded mine. It has successfully overcome a series of world-class technical challenges, including the safe and efficient pumping of 170 million cubic meters of accumulated water and the stabilization of damaged underground roadways. Each pump used in the project has a capacity of 1,800 cubic meters per hour. During the Reporting Period, the project discharged 37.93 million cubic meters of water, lowering the water level by 325 meters and laying the groundwork for further development. Designed with an annual processing capacity of 3 million tons, the project is expected to extend the mine's service life by 20 years, unlocking an additional 1.2 million tons of copper resources and generating hundreds of millions of dollars in annual fiscal revenue for Zambia.

卢安夏 20 及 28 号竖井区域抽排水项目是十五冶非洲公司与中色卢安夏铜业有限公司合作实施的标志性工程，旨在恢复一座因洪水淹没停产 24 年的百年老矿，通过技术创新实现资源再生与可持续发展。28 号竖井区域抽排水项目于 2024 年 10 月启动。作为全球首个深井淹没矿山超大规模恢复工程，该项目攻克了 1.7 亿立方米积水的安全高效抽排、受损巷道稳定性修复等一系列世界级技术难题，单台水泵流量达 1,800 立方米 / 小时，报告期内累计排水 3,793 万立方米，水位下降 325 米，为后续开发奠定基础。该项目规划年采选能力 300 万吨，预计延长矿山服务年限 20 年，可盘活 120 万吨铜金属资源，每年将为赞比亚贡献数亿美元财政收入。

The project has not only set a global benchmark for the restoration of flooded mines, but also exemplified a practical model of "resource regeneration, green development, and mutual benefits for all parties." By driving local economic growth and social progress, it offers a replicable Chinese solution for the sustainable development of Africa's mining sector.

该项目不仅树立了全球水淹矿山恢复的技术标杆，更以“资源再生、绿色发展、多方共赢”的实践，推动当地经济增长与社会进步，为非洲矿业可持续发展提供了可复制的中国方案。



Zambian President Hichilema attended the ribbon-cutting ceremony for the No. 20 and No. 28 Shaft Pumping and Drainage Project in Luanshya
赞比亚总统希奇莱马莅临卢安夏 20 及 28 号竖井区域抽排水项目剪彩仪式



A Photo of Pumping and Drainage Project in Luanshya Shaft Area
卢安夏竖井区域抽排水项目图

NFCA TBM Horizontal Shaft Development Project in the Southeast Orebody

中色非矿东南矿体 TBM 平巷开拓项目

NFCA TBM Horizontal Shaft Development Project in the Southeast Orebody is a landmark project implemented by CNMC at the Chambishi Copper Mine in Zambia. To address the inherent shortcomings of relying on drill-and-blast methods for underground shaft and tunnel construction in non-ferrous metal mines, such as poor working conditions, high safety risks, and the inability to operate continuously, and considering the industry's upgrading needs for mechanization and automation, the Company has taken the lead in introducing TBM equipment through cross-industry innovation into the non-ferrous metals sector, planning to use the "CNMC No. 2" TBM equipment, featuring an excavation diameter of 5.63 meters and a minimum turning radius of 50 meters, for the NFCA TBM Horizontal Shaft Development Project in the Southeast Orebody. The Phase I plan involves tunnel development at depths of 900 to 1,080 meters underground, with a total advance of 9.7 kilometers. This will mark the first deployment of a mining-dedicated TBM on the African continent.

中色非矿东南矿体项目是中国有色集团在赞比亚谦比希铜矿实施的标志性工程。针对有色金属地下矿山井巷施工依靠钻爆法作业环境差、安全风险高且无法连续作业的先天缺点，同时考虑到机械化、自动化行业升级需求，本公司率先在有色金属行业跨界创新引入 TBM（硬岩掘进机）设备，计划在中色非矿东南矿体平巷开拓项目引入使用“中国有色二号”TBM 设备，开挖直径 5.63 米，最小转弯半径 50 米。一期项目为东南矿体地下 900 米至 1,080 米巷道开拓，计划掘进 9.7 公里，是非洲大陆矿用首台 TBM 设备。



15MCC Africa Company launched its first TBM "CNMC No. 2"
十五冶非洲公司首台 TBM “中国有色二号” 荣耀下线

Ruida Hydrometallurgy Plant Project

瑞达湿法冶炼厂项目

Leveraging its strengths in mine design, mining, and operations, 15MCC Africa Company has undertaken the 3,000-ton-per-year Ruida Chifumpa Hydrometallurgy Plant Project under an "F+EPC+O" business model. Located in Zambia's North-Western Province, the project is designed to process over 200,000 tons of ore annually and produce more than 3,000 tons of cathode copper per year. The Company is responsible for the entire project lifecycle, from metallurgical testing, design, equipment procurement, construction, and commissioning to subsequent operations management. The project adopts a cost-plus-fixed-fee contract structure, with a production-based reward and penalty mechanism to share risks. The contract was signed in December 2024, with commissioning expected in October 2025. As 15MCC's first overseas "engineering-for-resources" project, it not only secures long-term resource revenue for the Company but also contributes to the upgrading of local metallurgical technology.

十五冶非洲公司充分发挥矿山设计、采矿、运营业务优势，采用“F+EPC+O”业务模式承接了瑞达齐丰帕 3,000 吨 / 年湿法厂项目。项目位于赞比亚西北省，设计年处理矿石 20 余万吨，年产阴极铜 3,000 余吨。本公司负责从冶金实验、设计、设备采购、施工建设到试车投产及后续生产运营管理的全流程服务。采用成本加固定比例酬金合同，并设置了产量奖惩机制共担风险。该项目于 2024 年 12 月签订合同，预计 2025 年 10 月建成投产。作为十五冶首个海外“工程换资源”案例，项目不仅为本公司创造长期资源收益，更带动当地冶金技术升级。

Looking Ahead: Building a Leading Integrated Mining Services Provider

展望未来：打造行业领先的矿山综合服务商

In 2024, 15MCC Africa Company was upgraded to a key regional headquarters. Guided by the strategy of "focus on nonferrous and seek to expand," the Company built an integrated, full-lifecycle service system encompassing "design, consulting, investment, construction, procurement, and operations". This transformation is driving the business toward greater "digitalization and eco-friendly".

Looking ahead, 15MCC Africa Company will build on its existing business foundation and position technological innovation at the core of its development. The Company will continue to deepen its expertise in copper smelting and mine services, while actively expanding into new business areas. It aims to strengthen its capabilities in underground mining to build a globally recognized brand and develop a diversified "Mining+" business portfolio. At the same time, 15MCC Africa Company will enhance its risk prevention and control system, reinforce local team building, and establish localized legal and tax teams. Through landmark projects such as the No. 20 and No. 28 Shaft Pumping and Drainage Project in Luanshya and NFCA TBM Horizontal Shaft Development Project in the Southeast Orebody, the Company will continue to export Chinese technology and management know-how, supporting Zambia's industrial upgrading and economic growth.

2024 年，十五冶非洲公司升级成为重点国别区域总部，以“立足有色、跳出有色”为指引，构建“设计、咨询、投资、建设、采购、运营”六位一体全生命周期服务能力，推动业务向“数字化、绿色化”转型。

未来，十五冶非洲公司将依托现有业务基础，以科技创新为引领，深耕铜冶炼与矿山服务核心领域，积极拓展新业务范畴，强化地下矿山攻坚能力以打造国际品牌，布局“矿山+”多元业务，同时完善风险防控体系，强化属地化团队建设，建立属地化法律、税务团队，通过卢安夏 20 及 28 号竖井区域抽排水项目、中色非矿东南矿体 TBM 平巷开拓项目等持续输出中国技术与管理经验，助力赞比亚技术升级与经济发展。



02 | 质量篇 QUALITY

We regard quality as the cornerstone of our operations and have built a full-lifecycle management system to deliver engineering excellence through lean standards. With a firm commitment to safety, we have established a multi-tiered risk prevention and control mechanism to safeguard the health and well-being of both Zambian and Chinese employees. Centered on creating value for our clients, we provide customized solutions that foster a win-win ecosystem. By unleashing the power of innovation, we inject fresh momentum into high-quality development and continue advancing along a path of sustainable growth.

我们以质量作为立企根基，构建全周期管理体系，以精益标准铸就工程品质；紧绷安全红线意识，建立多层次安全风险防控机制，守护中赞员工生命健康；聚焦客户价值核心，提供定制化解决方案，构建共赢生态；激活创新驱动引擎，迸发高质量活力，推进可持续发展新程。



Quality Management
质量管理

The Company upholds the quality philosophy that "quality is life, and products reflect character." It strictly complies with all relevant laws, regulations, and industry standards, and rigorously implements the *Project Quality Management Measures of 15MCC*. A comprehensive quality management system has been established to cover all stages of the project lifecycle from design and construction to final acceptance.

本公司坚持“质量就是生命，产品代表人品”质量理念，严格遵守质量相关法律法规及行业相关标准，贯彻执行《中国十五冶金建设集团有限公司项目质量管理办法》等管理办法，建立全流程质量管理体系，覆盖设计、施工、验收全环节。

- A benchmark-setting mechanism is established, complemented by technical briefings to guide execution;
 - Material and equipment management is reinforced through supplier qualification procedures and on-site inspection systems to ensure that components and machinery meet required standards;
 - The Company adopts a "three-level inspection system" (self-inspection, mutual inspection, and specialized inspection) and promotes standardized procedures across all stages of construction. For critical operations such as mining blasts and concrete pouring, quality control checkpoints are designated;
 - Advanced technologies such as Building Information Modeling (BIM) and non-destructive testing are employed for real-time monitoring;
 - Calibration procedures for measuring instruments and protocols for handling non-conforming materials are standardized;
 - A robust oversight framework is in place for subcontractors;
 - Protective measures for completed work are strictly enforced;
 - Acceptance standards for workmanship are applied rigorously;
 - A clear mechanism for addressing quality issues and incidents is maintained, etc.

建立样板引路机制，实施技术交底；

强化材料设备管控，执行供应商准入与进场检验制度，确保构配件及机械性能达标；

推行“三检制”（自检、互检、专检）与工序标准化作业，针对矿业爆破、建筑混凝土浇筑等关键工序设置质量控制点；

运用建筑信息模型（BIM）技术、无损探伤等手段实施动态监测；

规范计量器具校准、不合格品处置流程；

完善分包单位质量监管体系；

落实成品保护措施；

执行工作质量验收标准；

健全质量事故及问题处置机制等。

To ensure project quality, the Company strictly enforces process control protocols and deploys a dedicated quality inspection team. The following measures are implemented to safeguard engineering excellence

为落实项目质量管理，本公司严格执行质量过程控制工作，配备专业检测团队，并通过以下举措确保工程品质



The Company has established a quality traceability and corrective action closed-loop mechanism, regularly conducting QC team activities and continuously improving project quality, safety and environmental performance through the "PDCA" (Plan-Do-Check-Act) cycle. Project teams of the Company conduct weekly and monthly quality inspections. If quality issues are identified, they promptly issue quality rectification notices to ensure timely resolution within set deadlines. Monthly quality reports and quality incident assessments are integrated into quarterly project evaluations, further reinforcing quality management efforts.

本公司建立质量追溯与整改闭环机制，定期开展 QC 小组活动，通过“PDCA”（计划 - 执行 - 检查 - 行动）循环持续提升工程实体质量与安全环保水平。本公司项目部每周、每月定期开展项目质量检查，若发现质量问题，将及时下发质量整改通知单，督促项目部于限期内完成整改闭环。我们亦将月度质量报表、质量事故考核纳入至季度项目考核中，通过质量考核进一步确保质量管理工作。

Responsibility Case 责任案例

The Company undertook the AVIC International's Zambia Affordable Housing Project, effectively alleviating the local shortage of housing for public servants. Among these, Plot 45 of the Zambia Affordable Housing Project is located within the Kamfisa Police Training School in Kitwe, Zambia. Serving as welfare housing for police personnel, the project covers a total built-up area of 12,297 square meters, comprising 73 buildings with a total of 91 residential units. The construction began in September 2017 and was completed in October 2018, with a total duration of 14 months. During the project implementation, the Company used Plot 45 as a central hub to coordinate resources across four additional plots surrounding the Kamfisa Police Training School. Through scientific planning and allocation of manpower, materials, and machinery, the Company established standardized management processes and rigorously enforced technical briefings, sample projects, and construction site signage management. Coupled with a comprehensive supervision and control system throughout the entire process, the project successfully achieved its goals of zero safety incidents, full quality compliance, and precise schedule control.

本公司承建中航国际赞比亚保障房项目，有效缓解了当地公务员住房短缺问题。其中，赞比亚保障房项目 45 号地块位于赞比亚基特韦市卡姆菲萨警察培训学校内。其作为警用福利性住房，总建筑面积 12,297 平方米，含 73 栋住宅共 91 户。项目从 2017 年 9 月开工至 2018 年 10 月完工，总工期 14 个月。在项目实施过程中，本公司以 45 号地块为中心向卡姆菲萨警察培训学校周边的其他四个地块辐射，通过科学统筹人力、材料、机械资源配置，建立标准化管理流程，并且严格执行技术交底、样板工程及施工挂牌管理，配合全过程监督管控体系，最终实现安全零事故、质量全达标、工期节点精准把控的建设目标。

Thanks to the joint efforts of all personnel involved in the project, Plot 45 of the Zambia Affordable Housing Project was successfully completed within the contracted timeline and passed the final inspection on the first attempt, earning widespread praise and recognition.

在本公司全体参建人员的共同努力下，赞比亚保障房项目 45 号地块在合同工期内顺利完工，并一次性通过验收，获得多方的赞赏与认可。



Affordable housing project plot 45 in Zambia before construction (local staff conducted field survey)
建设前的赞比亚保障房项目 45 号地块（当地人员进行场地勘察）



A corner of the completed affordable housing project in Zambia
建成后的赞比亚保障房项目一角

In addition, the Company continuously strengthens employees' awareness of quality management and enforces accountability for quality control. Through a series of training programs, it comprehensively enhances project quality management, ensuring standardized and regulated engineering quality practices.

此外，我们不断增强员工质量管理意识，落实质量管理责任，开展多项质量培训活动，全面提升项目质量管理水平，实现工程质量管理规范化、标准化。



A quality training at 15MCC Africa Company
十五冶非洲公司质量培训

Emergency Support 应急保障

The Company strictly complies with Zambia's relevant laws and regulations concerning emergency preparedness and safe production, including the *Mines and Minerals Development Act*, the *Factories Act*, the *Occupational Health and Safety Act*, and the *Explosives Act*. It implements internal management systems such as the *Safety Production Management Measures* issued by 15MCC, and has established an emergency preparedness framework along with the *Safety and Environmental Management System* based on these regulations. Additionally, the Company has developed specific policies like the *Safety Management System for Outsourced Engineering Teams* applicable to subcontracted workers and various employees, ensuring effective implementation of safety responsibilities.

本公司严格遵守赞比亚《矿山与矿业发展法》(The Mines and Minerals Development Act)、《工厂法》(The Factories Act)、《职业健康与安全法》(The Occupational Health and Safety Act)、《爆炸物法》(The Explosive Act)等应急保障、安全生产相关法律法规，贯彻执行《中国十五冶金建设集团有限公司安全生产管理办法》等管理制度，并依据上述规定制定应急保障体系以及《安全环保管理制度》等制度。本公司同时制定适用于外委工程团队和各类雇员的《外委工程安全管理制度》等制度，切实落实安全保障责任。



During the Reporting Period 报告期内

The Company experienced no major or above production accidents, and the number of work-related fatalities over the past three years has been zero

本公司未发生较大及以上生产事故，并且过去三年因工亡故人数均为

0

The Company adheres to the safety principle of "safety first, prevention foremost, and comprehensive management," establishing an integrated Health, Safety, and Environment ("HSE") management system. Centered on clear safety and environmental responsibilities, it implements a system where leadership at all levels, functional departments, engineering personnel, and frontline operators bear layered accountability for safe production. Dedicated safety and environmental protection bodies have been established, including the Safety and Environmental Protection Committee and Office, as well as the Project Safety Leadership Groups. Safety and environmental officers are appointed to ensure the smooth execution of safe operations. To effectively fulfill its primary safety and environmental responsibilities, the Company sets annual safety and environmental management objectives at the beginning of each year in accordance with 15MCC's related policies and signs responsibility agreements with each project department. Based on these targets, project teams develop their own annual implementation plans. The Company also maintains a structured meeting system, holding daily, weekly, monthly, semi-annual, and annual safety and environmental production meetings, alongside special-topic sessions, to promptly address and resolve any issues arising in safety and environmental management.

本公司贯彻“安全第一、预防为主、综合治理”的安全工作方针，建立健康、安全 and 环境（“HSE”）三位一体的 HSE 管理体系，并严格以安全环保责任制为核心，实行各级领导、职能部门、工程技术人员、岗位操作人员对安全生产层层负责的制度。同时，我们设立安全生产和环境保护委员会及办公室、项目部安全生产领导小组等专责组织，并且设立安全环保专员，保障生产安全工作顺利开展。为有效落实安全环保主体责任，本公司依据中国十五冶相关制度要求，每年初制定年度安全环保管理目标，并与各项目部签订安全环保责任书。各项目部根据本公司下达的目标指标，制订年度安全环保工作实施要点。我们亦制定安全环保工作会议制度，开展日、周、月、半年度、年度安全环保生产例会以及安全环保专题会议，及时研究解决安全环保工作中存在的各项问题。



The Company adheres to the safety principle of "safety first, prevention foremost, and comprehensive management"
本公司贯彻“安全第一、预防为主、综合治理”的安全工作方针



The Company continuously strengthens safety risk management and hazard identification efforts by regularly identifying and assessing hazardous factors and developing risk prevention measures. Based on this, the Company compiles a *Safety Risk Identification and Hierarchical Control List* and communicates safety risks clearly. Prominent safety warning signs are placed at major hazard sources to alert workers to potential dangers. In addition, the Company enhances management of high-risk and dangerous operations by implementing systems of work permits and technical briefings for safety. Prior to commencing any high-risk projects, detailed construction plans must be developed, reviewed, and approved. Safety management teams at all levels of the Company conduct comprehensive safety inspections, targeted audits, and regular daily, weekly, and monthly safety patrols to promptly identify and address potential safety hazards, ensuring timely follow-up and corrective actions.



本公司持续加强安全风险管理和隐患排查治理，定期识别、评估危险和有害因素，制订风险防范措施，从而编制《安全风险辨识分级管控清单》，并对安全风险进行告知，在重大危险源的明显位置设置安全警示标志，提醒作业人员注意安全。同时，我们加强对危大工程作业、危险作业的管理，实行作业许可、安全技术交底制度，要求危大工程实施前必须编制专项施工方案，并经评审和批准后才能实施。本公司各级安全管理部门亦通过组织综合性安全检查、专项检查、月、周及日常安全巡查的方式，及时排查治理各类安全生产隐患，跟踪督促整改落实。



Safety warning signs installed at worksites and mandatory use of personal protective equipment for on-site workers
在作业现场配备安全警示标志并要求现场作业人员佩戴齐全的劳动保护用品

The Company has established a clear and accountable emergency management and accident response system, formulating and implementing the *Production Safety Accident Emergency Plan*. Each project department is required to develop its own comprehensive safety emergency plans, specialized emergency plans, and on-site response procedures based on actual conditions to promptly control safety incidents, ensure effective rescue operations, and protect employees' safety and assets of the Company. In the event of a safety accident, the Company will immediately activate the corresponding emergency plan according to the severity of the incident or hazard to prevent escalation. The accident will be reported in a timely manner according to its classification, and the Company will cooperate with investigations, implement corrective actions, and ensure proper follow-up.

本公司已建立权责明晰的应急管理和事故处理制度，制定并执行《生产安全事故综合应急预案》，要求各项目根据编实际情况编制各自安全综合应急预案、专项应急预案、现场处置方案，从而及时控制安全事故，确保有效组织救援并保障员工人身及公司财产安全。一旦发生安全事故，本公司将立即根据事故灾难或险情的严重程度启动相应的应急预案，防止事故扩大，并根据事故等级及时上报，同时配合调查处理，落实整改措施。

The Company organizes various safety drills, including slope collapse drills, fire emergency drills, and object strike emergency drills, to enhance employees' safety awareness and accident response capabilities.

我们组织开展多项安全事故演练，包括边坡坍塌事故演练、消防应急演练、物体打击事故应急演练等，从而提高员工的安全意识和应对事故能力。



During the Reporting Period 报告期内

The Company conducted a total of six safety drills

本公司共开展

6 次安全演练

With 1,580 participants involved

参与人数为

1,580 人次



Local staff conducted fire emergency drills
属地员工进行消防应急演练



Emergency drill for mechanical injury accidents
开展机械伤害事故应急演练

We place great emphasis on employee safety education and training by establishing a comprehensive safety education and training system and developing detailed training plans. Safety training is integrated throughout all stages of production and operations and implemented progressively across different organizational levels to continuously enhance the safety awareness, knowledge, and skills of employees, contractors, and other stakeholders. The Company conducts safety education and training programs for new employees at the corporate, project, and job levels, and requires all operators to complete pre-job safety technical briefings.

我们高度重视员工安全教育培训，制定安全教育培训制度并编制安全教育培训计划，将安全教育培训工作贯穿于生产经营的全过程，并分层级逐次落实，从而持续提高员工和承包商等相关方的安全意识、安全生产知识和技能。本公司开展面向新员工的公司级、项目级和岗位级的安全教育培训，并且要求操作人员完成岗前安全技术交底工作。

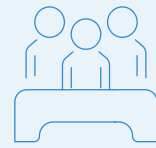


During the Reporting Period 报告期内

We organized safety awareness training, fire safety education sessions, and conducted a Safe Production Month campaign. The annual safety training completion rate for all employees reached 100%.

我们组织开展安全警示教育、消防安全警示教育学习等培训，并举行安全生产月活动，年度全员安全教育培训率达

100%



Zambia and Chinese employees jointly launched the Safe Production Month campaign
中赞员工共同启动安全月



Conduct pre-job safety technical briefing
进行安全技术交底

Customer First 客户至上

The Company upholds a service philosophy of "customer first, beyond expectations," providing production maintenance and protection services to customers. With a team of experienced and highly skilled engineering professionals, as well as ample materials and equipment, the Company is well-equipped to promptly respond to and meet owners' warranty needs.

The Company actively listens to customer feedback and continuously improves its feedback mechanisms, offering multiple channels such as email and phone for communication. Upon receiving a customer complaint, the Company responds promptly, with the relevant departments conducting investigations and taking appropriate actions. It ensures corrective measures are implemented and provides feedback to the customer upon resolution.

Additionally, the Company conducts monthly customer satisfaction surveys, inviting clients to provide objective evaluations. For any areas of concern raised by customers, the Company promptly carries out further research, implements corrective actions based on the findings, and continuously improves project management to better meet client needs.

本公司坚持“客户至上，超越需求”的服务理念，为客户提供生产维修保护服务。我们拥有充足的经验丰富、技术能力过硬的工程技术人员以及充足的材料设备，可积极响应并满足业主主的保修需求。

本公司积极聆听客户的反馈，不断完善客户反馈机制，设有邮箱、电话等反馈渠道。当收到客户投诉后，本公司将及时进行响应，由相关部门开展调查和处理，并采取相应措施，督促整改工作的落实，最终向客户进行反馈。

此外，我们每月开展顾客满意度调查工作，邀请客户进行客观评价。针对客户反馈的不足之处，我们及时调研，根据调研结果整改，并持续提升项目管理水平，满足业主需求。



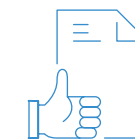
During the Reporting Period 报告期内



The Company achieved an average annual customer satisfaction score of 96.04 out of 100

本公司的年度客户平均满意度达

96.04 分（满分 100 分）



And received five letters of commendation from customers

并且收到 **5** 封来自客户的表扬信

R&D Innovation
研发创新

R&D innovation injects strong momentum into the Company's sustainable development. The Company comprehensively promotes management and technological innovation, conducting R&D innovation activities in accordance with the *Technical Innovation Management Measures of 15MCC*. Efforts focus on enhancing capabilities in "intelligent construction, green construction, quality construction," while also stimulating the enthusiasm for innovation among technical staff and workers. During the Reporting Period, the Company initiated technical innovation research related to drainage engineering and slope stabilization, successfully completing these projects on schedule. In addition, significant progress was made in building innovation platforms, including the establishment of the "Light of Africa" Innovation Studio.

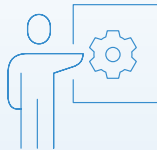
研发创新为企业的可持续发展注入强劲动力。本公司全面推进管理与技术创新，依据《中国十五冶金建设集团有限公司技术创新管理办法》开展研发创新工作，提升“智能建造、绿色建造、品质建造”水平，同时激发技术人员和工人队伍技术创新热情。报告期内，本公司启动有关排水工程技术、边坡治理等方面的技术创新研究，已按时结题。此外，我们大力推进创新研发平台建设，成立“非洲之光”创新工作室。

During the Reporting Period
报告期内

The Company was granted one patent authorization

本公司获得

1 项专利授权



Responsibility Case
责任案例

The Luanshya Copper Mine, located in Luanshya City of Zambia's Copperbelt Province, is a century-old mine that was abandoned in 2001 due to flooding, resulting in 170 million cubic meters of water accumulation, equivalent to the volume of 12 West Lake in Hangzhou, China, creating a so-called "dead mine." Faced with this immense challenge and determined to fully exploit the mineral resources, the Company leveraged its spirit of R&D innovation, conducting extensive investigations and experiments to develop the optimal solution. Currently, the No. 28 Shaft Pumping and Drainage Project in Luanshya is revitalizing the century-old flooded mine by pumping water at an average rate of 300,000 cubic meters per day.

卢安夏铜矿是位于赞比亚铜带省卢安夏市的百年老矿，2001 年因洪水淹没而废弃，形成 1.7 亿立方米积水（相当于 12 个西湖水量）的“死亡矿井”。面对如此难题，为了能充分挖掘矿产资源，本公司充分发挥研发创新精神，积极调研、试验，探索出最优解决方案。目前，卢安夏 28 号竖井区域抽排水项目正以日均 30 万立方米排水速度，让被洪水淹没的百年老矿重获新生。



Zambian President Hichilema inspected the Pumping and Drainage Project in Luanshya Shaft Area
赞比亚总统希奇莱马视察卢安夏竖井区域抽排水项目

Using an innovative "V-shaped headframe plus ultra-high-flow submersible pump" technology developed by the Chinese team—each pump delivering 1,800 cubic meters per hour and breaking through traditional mining pumping and drainage efficiency limits—we built a drainage system within the No. 28 shaft at a depth of 1,200 meters. During the Reporting Period, a total of 37.93 million cubic meters of water was pumped out, lowering the water level by over 325 meters. Structural inspections confirmed that the exposed century-old shaft remains intact. Our project team spent 680 days establishing a "three-level progressive closed network" measurement system with ± 1 cm accuracy to precisely reconstruct mine coordinates, a method now recognized as an industry standard in Zambia. The project plans an annual mining capacity of 3 million tons. Once fully operational, it is expected to unlock 1.2 million tons of copper resources, create 3,000 new jobs, and supply high-quality groundwater for irrigating surrounding farmland, helping to alleviate drought conditions.

Through our relentless efforts in R&D innovation, we have not only extended the mine's service life from 6 to 20 years but also established a benchmark for Africa-China capacity cooperation by adopting a model of "technology transfer + talent development + ecological restoration."



On-site deployment of drainage pipes at Luanshya Shaft No. 28
卢安夏 28 号竖井下水管下放现场

通过中国团队首创“V 型井架 + 超流量潜水泵”组合技术（单台流量 1,800 立方米 / 小时，突破传统矿山排水效率极限），我们在 1,200 米深的 28 号竖井内构建排水系统，于报告期内累计抽排 3,793 万立方米，水位下降超 325 米，露出的百年井筒经检测结构完好。我们的项目团队耗时 680 天建立“三级递进闭环网”测量体系，以 ± 1 cm 精度重构矿区坐标，被赞比亚列为行业标准。该项目规划年采选能力 300 万吨，全面投产后预计将盘活 120 万吨铜资源，新增 3,000 岗位，而抽排的优质地下水用于周边农田灌溉，缓解旱情。

通过我们的科研创新的不懈努力，不仅将让矿山服务年限从 6 年延至 20 年，更以“技术输出 + 人才培养 + 生态修复”模式，成为中非产能合作标杆。

03 环境篇

ENVIRONMENT

Guided by the principle of green development, we have established a comprehensive environmental management system covering the full project lifecycle. We strictly control emissions of air pollutants, wastewater, and solid waste to ensure compliance with regulatory standards. By implementing a dual-cycle model of "resources and energy," we promote resource recycling and energy transition. We actively advance our low-carbon strategy and strengthen climate risk management. Committed to safeguarding ecological red lines, we strive to harmonize project development with nature. Through responsible action, we contribute to a greener Africa and inject sustainable momentum into the continent's development.

我们以绿色发展理念为纲，构建全生命周期环境管理体系，严格管控废气、废水、废渣等排放物，确保合规达标排放；实施“资源-能源”双循环模式，推动资源循环利用与能源转型；积极践行低碳战略，深化气候风险应对；严守生态红线，实现项目开发与自然和谐共生，以责任担当共筑绿水青山，为非洲可持续发展注入绿色动能。



Environmental Management 环境管理

The Company adheres to the *Environmental Protection Management Measures of 15MCC* and other relevant policies, upholding the environmental philosophy of "green development, healthy living". We have formulated and implemented an *Environmental Protection Management System* and established a clear accountability framework for environmental protection and workplace safety.

The Company has established an HSE management system and formed leading bodies such as the Safety Production and Environmental Protection Committee to oversee and coordinate environmental protection efforts. Each department is responsible for implementing specific tasks. With a focus on the compliant discharge of wastewater, exhaust gas, and solid waste ("three wastes") and on building green projects, we cascade these goals across all operational units. Measures to identify hazards, mitigate risks, and assign responsibilities are implemented at every level down to individual positions, ensuring a comprehensive approach that engages all employees, controls risks, promotes continuous improvement, and delivers environmental performance. Moreover, we have integrated environmental protection into our performance evaluation criteria for recognizing outstanding teams and individuals. A one-vote veto system is enforced to ensure strict accountability.

Green Operation 绿色运营

The Company is committed to integrating environmental protection into every aspect of its daily operations, covering areas such as emissions management, resource and energy management, and tackling climate change. While reinforcing environmental compliance, we actively promote clean production and circular economy practices, aiming to achieve all-process, all-weather, and all-employee environmental management and green operations. In addition, we continue to upgrade our technologies and equipment by adopting advanced energy-efficient technologies, processes, equipment, and materials. We phase out outdated, high-energy-consuming, high-pollution, and low-efficiency practices in a timely manner, driving the transition toward cleaner and more sustainable operations.

本公司贯彻落实《中国十五冶金建设集团有限公司生态环境保护管理办法》等制度，坚持“绿色相随，健康相伴”的环保理念，制定并执行《环境保护管理制度》以及安全环保责任制。

本公司已建立 HSE 管理体系，成立安全生产和环境保护委员会等领导小组对环境保护工作进行统筹管理，由各级部门落实执行。我们以废水、废气、废弃物（“三废”）合规排放、打造绿色项目为目标，并将目标分解到各基层组织，将识别危害、削减风险的措施及责任逐级落实到岗位人员，实现“全员参加、控制风险、持续改进、确保绩效”的工作要求，有效开展生态文明建设。此外，我们坚持将环境保护工作作为评选先进的必要条件，实行一票否定制。

本公司坚持将环境保护工作纳入日常生产经营活动的全过程中，涵盖排放物管理、资源与能源管理、应对气候变化等范畴。在夯实环境合规管理工作的同时，我们积极推进清洁生产，发展循环经济，致力于实现全过程、全天候、全员的环保管理与绿色运营。此外，我们加强技术工艺装备的更新改造，采用高效节能新技术、新工艺、新设备和新材料，及时淘汰高能耗、高污染、低效率的工艺和设备，推动运营的清洁化、绿色化发展。

Emission Management 排放物管理

The Company strictly complies with Zambia's environmental laws and regulations, including the *Environmental Protection and Pollution Control Act*, the *Mines and Minerals Development Act*, the *Air Pollution Control (Licensing and Emission Standards) Regulations*, the *Water Pollution Control (Effluent and Waste Water) Regulations*, and the *Hazardous Waste Management Regulations*, as well as relevant industry standards. We implement comprehensive monitoring and control measures for wastewater, dust, solid waste, and noise generated during production processes to ensure all pollutants are discharged in compliance with regulatory standards.

本公司严格遵守赞比亚《环境保护及污染控制法》(The Environmental Protection and Pollution Control Act)、《矿山与矿业发展法》(The Mines and Minerals Development Act)、《大气污染控制规定》(The Air Pollution Control (Licensing and Emission Standards) Regulations)、《污水排放控制法令》(The Water Pollution Control (Effluent and Waste Water) Regulations)、《危险废物管理规定》(The Hazardous Waste Management Regulations) 等环保法律法规和行业标准，实施对生产过程中产生的废水、粉尘、固体废物以及噪声污染的监控与防治，确保污染物达标排放。

Wastewater management 废水管理

In strict accordance with environmental protection requirements, the Company has implemented targeted measures to treat both industrial and domestic wastewater. This includes the construction of wastewater treatment stations and related facilities to ensure proper treatment. Treated water is discharged in compliance with regulatory standards only after meeting the required water quality benchmarks.

严格按照环保相关要求，采取针对性措施处理生产和生活废水，包括建设废水处理站和相关设施进行废水处理，在满足水质要求后进行合规排放。

Dust management 粉尘管理

Dust generated during construction and production activities is effectively managed through measures such as mist spraying, water sprinkling, wet drilling, and the installation of dust collectors. These practices help significantly reduce the environmental impact of dust emissions.

有效处置建筑施工、生产过程中产生的粉尘，通过喷雾、洒水、湿式凿岩、设置除尘器等方式有效降低粉尘对环境产生的影响。

Solid waste management 固体废弃物管理

We strictly adhere to Zambia's waste discharge standards to implement comprehensive waste management. This includes waste classification, compliant waste disposal, and the promotion of waste recycling and a circular economy. In accordance with safety and environmental monitoring regulations, we have designated and standardized storage sites for waste generated during mining operations. Measures such as dust suppression, anti-leakage controls, and other safeguards are deployed to prevent secondary environmental pollution and ensure environmental protection.

严格遵循赞比亚的废物排放标准综合管理废弃物，实施垃圾分类管理，并且在废弃物合规处置的基础上，促进废弃物的循环利用和循环经济。我们按照安全及环保监测等规定设有专用、规范的堆积场所储存开采过程中产生的废弃物，并采取防扬尘、防渗漏或其它防止二次污染环境的措施，避免环境污染。

Noise management 噪声管理

During production, we implement noise reduction, sound insulation, and vibration-damping measures at locations where noise and vibration may occur during start-up, shutdown, and maintenance activities, ensuring that noise emissions comply with applicable standards.

在生产过程中，对开停工、检修过程产生噪声和震动的部位采取消音、隔音、防震等措施，使噪声达标排放。



Watering and dust reduction on the mining road
在运矿道路上进行洒水降尘

Resource and Energy Management

资源与能源管理

The Company actively promotes green production by building a resource recycling system, optimizing resource allocation, and striving for more efficient mineral resource utilization, environmentally friendly mining practices, and cleaner production processes. In response to international and local policies on energy conservation and carbon reduction, we have developed energy-saving plans and adopted green construction design and management practices to improve the efficiency of fossil fuel use, including gasoline and diesel. We also plan to replace traditional fuel-powered mining trucks with electric alternatives to reduce reliance on fossil fuels. Meanwhile, we pursue the comprehensive utilization of waste rock from mining activities to improve the recovery rate of mineral resources.

We carry out water conservation and pollution reduction initiatives by strengthening water usage inspections to minimize leakage, overflow, and wastage, while also promoting the recycling of water resources to improve overall water use efficiency.

We also actively leverage our extensive construction experience to take the application of renewable energy technologies into projects' consideration based on practical conditions, addressing customers' needs for energy conservation and carbon reduction. In addition, we undertake the construction of local energy infrastructure in Zambia, providing strong support for energy supply to mining smelters and enterprises within cooperation zones.

本公司积极推进绿色生产，构建资源循环体系，优化资源配置，努力实现矿产资源集约化、开采方式环保化、生产工艺清洁化。我们积极响应国际和当地节能降碳相关政策，制定节能计划，通过绿色施工设计及组织，提高汽油、柴油等化石能源的使用效率，同时也将推进电动矿卡替代传统燃油矿卡，降低对化石能源的依赖。此外，我们综合利用采矿废矿石，提高矿石资源回收率。

我们开展节水减污活动，一方面加强用水检查，减少跑、冒、滴、漏现象，另一方面促进水资源的循环使用，提高水的综合利用率。

我们也积极发挥丰富的建筑施工经验，在项目中结合实际情况考虑新能源技术改造与应用，应对业主客户的节能降碳需求。此外，我们承建赞比亚当地能源基础设施，为矿山冶炼厂区或合作园区企业用能提供了坚实的保障。



Responsibility Case 责任案例

As Zambia's economy and society develop, the community's electricity demand is rising steadily, especially in enterprise hubs such as cooperation zones where power requirements continue to increase. The Company has undertaken key energy infrastructure projects, including the construction of the 330KV Substation in Chambishi, the NFCA 220KV Substation, and the power extension for the substation in Zambia-China Economic and Trade Cooperation Zone. Following national standards and power delivery plans, we have designed and built these facilities to high-quality standards. The successful completion of these projects ensures reliable power supply to enterprises and enhances the stability of electricity usage and energy consumption.



330KV Substation Construction Project in Chambishi
谦比希 330KV 变电站建设项目



NFCA 220KV Substation Construction Project
NFCA220KV 变电站建设项目

随着赞比亚经济和社会发展，社区的用电需求日益提升，尤其是合作园区等企业集中地对用电要求不断提高。本公司承建谦比希 330KV 变电站建设项目、NFCA220KV 变电站建设项目、中赞合作区变电站电力续建项目等能源基础设施项目，按照国标规范和送电方案要求，进行设施设计和建设，高质量完成项目。这些项目的顺利建成，为企业供电提供了保障，提升用电用能的稳定性。

Tackling Climate Change 应对气候变化

Climate change has become a severe challenge to the global ecosystem and human survival and development. Increasing occurrences of extreme weather events and rising sea levels highlight the growing climate risks, which pose threats to business operations but also present new opportunities. In response, the Company actively supports international initiatives such as the *Paris Agreement*, as well as China's carbon neutrality and peak carbon policies. We identify and assess climate-related risks and opportunities, and develop energy-saving, emission reduction plans and corresponding response measures.

当前，气候变化已对全球生态及人类生存发展构成严峻挑战。极端天气频发、海平面上升等气候问题日益凸显，为企业发展带来风险，但同时也伴随着机遇。对此，本公司积极响应国际《巴黎协议》、中国碳中和、碳达峰等政策，识别及评估气候风险及机遇，制定节能减排计划及应对措施。

Ecological Protection 生态保护

The Company is committed to protecting the local ecological environment in Zambia and building a beautiful, sustainable homeland. We strictly comply with relevant environmental protection laws and regulations, formulate and implement various environmental measures to minimize the negative impact of our operations on the ecosystem. Additionally, we strengthen environmental management of external construction contractors, requiring them to hold valid construction permits and prevent pollution during construction. Contractors must also ensure the site is clean and materials are removed upon project completion. In cases of vegetation damage, restoration measures are mandated.

The Company continuously strengthens environmental monitoring and emergency response capabilities and conducts regular environmental monitoring in production and living areas. We have established emergency response plans for unexpected environmental incidents to ensure timely and effective handling. In the event of a sudden environmental issue, we promptly implement emergency measures to control the spread of pollution and notify relevant authorities without delay.

The Company continuously enhances environmental awareness and skills across all employees by actively conducting training and education on green and low-carbon practices and environmental protection. We promote the concepts of ecological civilization, disseminate environmental knowledge widely, and place special emphasis on awareness campaigns for World Environment Day (June 5) and Ecological Environment Day (August 5).

本公司致力保护赞比亚当地生态环境，建设美丽生态家园，严格遵守生态环境保护相关法律法规，制定并实施各项环境保护措施，确保运营活动对生态环境的负面影响降到最低。此外，本公司加强对外来施工单位施工作业的环境管理，要求其必须持有合规的施工许可证，并在施工过程防止产生污染，且于施工后要达到工完、料净、场地清；若造成植被损坏，要求施工单位采取恢复措施。

本公司不断加强环境监测和事故应对，定期对生产和生活区域进行环境监测，并制定突发环境事件应急预案，及时有效处理突发环境事件。若发现突然环境事件，本公司将立即采取应急处理措施，控制污染事态的发展，并且及时通知相关部门。

本公司持续提升全员的环保意识和技能，积极开展绿色低碳、环境保护方面的知识宣传培训，进行生态文明思想培训学习，普及环保知识，并且重点做好“6.5 世界环境日”和“8.5 生态环境日”的宣传工作。



Promoted environmental protection and energy-saving knowledge to Zambian employees
向赞方员工宣传环保节能知识



04 | 员工篇 EMPLOYEES

Human resources are the core engine of enterprise development. We continuously strengthen talent team building, improve the human resource management system, and implement localized operation strategies to enhance local workforce engagement. Adhering to international standards, we refine the occupational health and safety system to ensure employee health and safety. We also establish skills training and global empowerment platforms to promote talent development. By deepening corporate care and support, we aim to enhance employees' sense of belonging and overall well-being.

人才资源是企业发展的核心引擎。我们持续加强人才队伍建设，完善人力资源管理体系，落实属地化运营战略，加强属地化用工；以国际标准完善职业健康安全体系，保障员工健康安全；搭建技能培训与全球化赋能平台，促进人才发展；深化企业人文关怀，提升员工的团队归属感和幸福感。



Employee Rights and Interests

员工权益

The Company strictly complies with Zambia's labor-related laws and regulations, including the *Employment Act* and the *Minimum Wages and Conditions of Employment Act*. It implements 15MCC's human resources management policies, establishing a multi-tiered employee and rights and interests protection system to effectively safeguard the legitimate rights and interests of all workers. Furthermore, the Company adheres to international standards such as the *International Covenant on Human Rights* and the *Universal Declaration of Human Rights*, ensuring sound employment practices and preventing the use of child labor or forced labor.

The Company reasonably safeguards the rights and interests of Zambian employees by contributing to the local Zambia-China Friendship Hospital's medical insurance scheme to meet the healthcare needs of on-duty Zambian staff. It conducts annual collective bargaining with local labor unions and provides a range of employee benefits, including funeral allowances, education subsidies, and transportation subsidies.

The Company is committed to fostering a fair and inclusive employment environment, upholding the principle of equal opportunity, and strictly prohibiting discrimination based on gender, age, nationality, religion, or ethnicity. To ensure fairness and transparency in recruitment, the Company has established a well-structured hiring system and recruits talent through various channels, including campus recruitment and social hiring.

The Company actively promotes a localized talent strategy, offering employment opportunities at various levels to the local community. We have conducted campus recruitment drives for local management trainees at the Copperbelt University and actively participated in job fairs organized by the Confucius Institute at the University of Zambia in Lusaka. Students who pass interviews and express an interest in working with the Company are invited to participate in internships, during which a mentorship system is implemented to help them adapt to the work environment and enhance their professional skills. Based on their performance during the internship, outstanding candidates are offered formal employment. For social recruitment, the Company publishes job openings through official media channels to attract a broad range of talent. Additionally, we identify and hire high-performing individuals from among existing outsourced or contracted personnel through structured assessments such as examinations.

本公司严格遵循赞比亚《雇佣法》(The Employment Act)、《最低工资和雇佣条件法》(The Minimum Wages and Conditions of Employment Act)等劳动相关法律法规，贯彻执行中国十五冶人力资源管理相关制度，构建多层次员工权益保障机制，切实保障每位劳动者的合法权益。此外，我们遵守《国际人权公约》《世界人权宣言》等国际准则，健全用工规范与准则，避免雇佣童工或强制劳工。

本公司合理保障员工权益，在属地的中赞医院缴纳医疗保障金，满足在岗赞籍员工的就医需求，每年与当地工会组织开展工会谈判，并且提供包括丧葬补贴、教育补贴、交通补贴等福利。

本公司致力营造公平、多元的雇佣环境，秉持平等就业原则，坚决杜绝性别、年龄、国别、宗教、种族等歧视。为了确保招聘工作的公正公平，我们已建立完善的招聘机制，通过校园招聘、社会招聘等多种形式招聘人才。

我们积极推进属地化人才战略，为当地社会提供不同层级的就业机会，在赞比亚铜带大学举办属地化管理人员校园招聘，并积极参加赞比亚大学孔子学院在卢萨卡举办的校园招聘。我们将安排通过面试且与本公司有合作意向的学生到企业实习，在实习期间实行“师带徒”模式，帮助其更好地适应工作环境、提升专业技能，并在实习期结束后根据表现择优录取。在社会招聘方面，我们通过官方媒体发布招聘信息，广泛吸引社会人才。我们也会从现有外聘或劳务派遣人员中，通过组织考试等方式，选拔出表现优秀的人才予以录取。



Participated in the talent recruitment fair at University of Zambia
参加赞比亚大学人才招聘会



Campus recruitment of localized management personnel held at Copperbelt University in Zambia
在赞比亚铜带大学举办属地化管理人员校园招聘



In addition, the Company continues to enhance the knowledge and technical capabilities of local employees by cultivating Zambian senior management personnel in key positions such as legal affairs, human resources, safety, and business operations, thereby building a localized management team. The Company has also established a deep cooperative relationship with the Zambia-China Vocational and Technical College, and signed a targeted training agreement for heavy equipment maintenance technicians to ensure the stable annual supply of skilled Zambian workers.

此外，我们持续提升当地人员知识、技术水平，在法务、人力资源、安全、商务等岗位培养赞籍高级管理人员，打造属地化团队，并且通过与中赞职业技术学院开展深度合作，签订重型设备维修技术工人定向培养协议，每年稳定输送专业赞籍技能人员。



During the Reporting Period 报告期内

The Company employed 1,820 local Zambian staff, effectively contributing to the development of the local labor market

本公司拥有 **1,820** 名赞比亚本地员工，有效促进当地就业市场发展



The Company strictly implements the *Compensation Management Measures* and other relevant remuneration policies of 15MCC, and has established a comprehensive and competitive compensation system. This system consists of "base salary, performance bonuses, and special allowances". In strict compliance with local regulations, the Company fully contributes to social insurance schemes and also provides a range of benefits, including housing provident fund, commercial insurance, corporate annuities, meals and accommodation, holiday benefits, and high-temperature operation allowances, ensuring the protection of employees' lawful rights and interests.

本公司贯彻执行《薪酬管理办法》等中国十五冶薪酬管理制度，建立健全薪酬管理体系，构建具有市场竞争力的由“基本工资+绩效奖金+专项补贴”组成的薪酬结构。我们严格按属地政策缴纳社会保险，并且提供公积金、商业保险、企业年金、食宿、节日福利、高温作业津贴等福利，切实保障员工合法权益。

The Company has established working hour and leave policies in accordance with relevant laws and regulations to ensure that all employees are entitled to paid annual leave, statutory holidays, and other types of leave as stipulated by laws. For overseas employees, a flexible leave system is implemented—for example, setting a baseline of 45 days of annual home leave, which increases to 50 days after one year of continuous service. Additionally, the Company provides shuttle services for overseas employees during major holidays to enhance their sense of belonging.

本公司按照相关法律法规要求制定工作时数及假期制度，保障全体员工依法享有带薪年假、法定节假日等各类休假权益，并且对海外员工实施弹性休假制度，例如列明年度回国假期基准为 45 天，员工连续服务满 1 年增至 50 天等，同时在重大节假日提供海外员工接送服务，提升员工归属感。

The Company always regards its employees as the core driving force behind its development. Every year, it regularly holds the "Zambia-China Outstanding Employee Awards," recognizing role models based on work performance, innovation capabilities, and teamwork. Awarded employees receive not only certificates of honor and monetary bonuses but also have their achievements showcased through internal platforms and bulletin boards, ensuring their contributions are recognized and their efforts acknowledged.

本公司始终将员工视为发展的核心力量，每年定期开展“中赞先进员工评选”活动，从工作业绩、创新能力、团队协作等方面发掘标杆榜样。对当选的优秀员工，我们不仅颁发荣誉证书与奖金，还通过企业内部平台、宣传栏等展示其优秀事迹，让贡献被看见、让努力有回响。

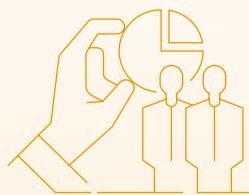


During the Reporting Period 报告期内

The Company achieved 100% coverage in providing social and work injury insurance for all employees

本公司为全体员工缴纳社会保险及工伤保险，覆盖率达

100%



The "Zambia-China Outstanding Employee Awards" recognized and awarded model employees

“中赞先进员工评选”活动嘉奖优秀员工

Occupational Health and Safety

职业健康安全

The Company places great importance on employee safety and health, upholding the "safety-first and prevention-focused" principle. It strictly complies with relevant occupational health and safety laws and regulations, continuously improves its occupational health and safety management system, establishes a three-tier occupational health management network, and deploys full-time and part-time occupational health professionals to comprehensively safeguard employees' safety and well-being.

本公司高度重视员工生命安全和身体健康，贯彻“安全为天、防范为先”的安全理念，严格遵守保障职业健康与安全的相关法律法规，不断完善职业健康安全管理体系，成立三级职业健康管理网络，并配备专（兼）职的职业健康专业人员，全方位确保员工的安全与健康。

The Company has established a comprehensive occupational health and safety management system that integrates rights and interests protection, risk management, health monitoring, and education and training into a unified framework. We implement controls to prevent occupational disease hazards by applying the Working Conditions Hazards Analysis (LEC) method to evaluate job risks and classify control measures. This enables us to fully identify occupational hazards such as dust, noise, and toxic or harmful gases in the workplace, develop precise prevention lists, and take targeted measures to reduce risks at their source. Labor protective equipment is provided according to the specific job types and work characteristics of employees, and seasonal measures such as heatstroke prevention and cold protection are implemented to ensure safety and health during work. Additionally, we offer comprehensive health examinations covering pre-employment, ongoing employment, and exit stages, maintaining annual health records and dynamic monitoring for all employees. Through a systematic training program, we deepen awareness of occupational disease prevention laws and regulations and conduct occupational health knowledge competitions to strengthen risk awareness.

本公司建立健全职业健康与安全管理保障机制，形成权益保障、风险治理、健康监测、教育培训四位一体的职业健康安全防护体系。我们落实职业病危害因素防控工作，运用作业条件危险性评价（LEC）法实施岗位风险分级管控，全面识别工作场所中粉尘、噪声、有毒有害气体等职业病危害因素，从而制定精准防控清单并采取针对性防范措施，从源头降低危害；针对作业人员工种、岗位工作特点配发劳动防护用品，同时针对季节特点采取相应的防暑降温、防寒防冻措施，保障员工在劳动过程中的安全和身体健康。此外，我们提供岗前、在岗及离职全周期健康体检，构建全员年度健康档案与动态监测体系，并且依托系统化培训机制，深化职业病防治法律法规的宣传教育，开展职业健康知识竞赛强化风险意识。





Responsibility Case 责任案例

In August 2023, the Zambian government held a national emergency rescue competition, attracting eighteen teams from across the country. The participating teams were required to carry out emergency rescue operations based on various simulated scenarios, testing their teamwork and emergency response capabilities.

赞比亚政府于 2023 年 8 月举办全国应急救援比赛，吸引来自该国各地的十八支代表队参与。各参赛队需要根据不同的现场情况开展相应的应急救援，考验参赛队伍的团队协作和应急处理能力。

The team from our Luanshya Mining Project Department responded swiftly to various emergency scenarios during the competition, earning high praise from the judges for their outstanding performance and efficient rescue operations. This event not only tested the emergency response capabilities of the Luanshya Mining Project team but also provided an opportunity for emergency personnel from different regions to exchange knowledge and learn from each other, further enhancing our employees' awareness and ability in emergency preparedness and response.

本公司卢安夏采矿项目部代表队在比赛中面对各种突发情况，迅速做出决策，以出色的表现和高效的救援行动赢得了评委的高度评价。此次比赛不仅检验了卢安夏采矿项目部应急救援能力，也为各地的应急救援人员提供了交流学习的机会，进一步提升了本公司员工的应急保障意识和处置能力。



Participated in the regional emergency rescue competition in Zambia
参与赞比亚地区性应急救援比赛

Training and Development 培训发展

The Company upholds the talent development philosophy of "maximizing individual potential and putting the right people in the right roles" and continuously improves career development pathways to empower employees' growth. Following management guidelines such as the *Job Grade Management Measures of 15MCC*, the Company has established a comprehensive, clear, standardized, and efficient grade and promotion management system. Employee grades are adjusted based on three main categories: management track, professional track, and technical skills track. Additionally, an annual grade review mechanism is in place. The review process strictly adheres to multiple evaluation criteria, including professional technical qualification requirements, job competency assessments, and quantitative performance evaluations.

Based on business development needs and the realities of the Zambian market, the Company implements the requirements of the *Training Management Measures of 15MCC* and has established a comprehensive talent development system covering core business areas such as engineering, safety and environmental protection, commerce, finance, materials, market development, and auditing. At the same time, the Company carries out an integrated certification training program encompassing professional qualification certificates, technical titles, and job competency certifications. We also conduct specialized training to improve the skill levels of industrial workers. New employees undergo pre-job vocational skills training followed by assessment and certification, enhancing employee knowledge and skills from multiple dimensions. For example, we use the steel structure factory in the Chambishi area as a practical training base, where we annually train welders to meet the Company's demands and contribute skilled Zambian workers to the local labor market.

本公司秉承“人尽其才，才尽其用”的人才发展理念，持续完善员工职业发展通道建设，赋能员工发展。本公司依据《中国十五冶金建设集团有限公司职级管理办法》等管理办法，构建通道完备、标准明晰、管理规范、运行高效的职级管理体系、晋升管理体系，按照管理序列、专业序列、技能序列三大分类进行职级调整，并且建立年度职级评审长效机制。职级评审过程严格执行专业技术资格准入、岗位胜任能力评估、工作业绩量化考评等多种评价标准。

立足业务发展需要及赞比亚市场实际，本公司贯彻执行《中国十五冶培训管理办法》要求，构建覆盖工程、安全环保、商务、财务、物资、市场开发、审计等核心业务系统的复合型人才培养机制。同时，我们实施职业资格证书、专业技术职称、岗位资格认证三位一体的取证培养计划，配套开展产业工人技能等级提升专项培训，同步针对新入职员工开展岗前职业技能强化训练并实施考核认证，多角度全方位地提升员工知识与技能。例如，我们以谦比希地区的钢结构厂为实训基地，每年定点培养电焊工，满足企业需求之外，向社会输送赞籍技能人员。



During the Reporting Period 报告期内

The Company's full-time employees received an average of 32 hours of training each

本公司全职员工人均受训时长为

32 小时

Provided training on steel structure processing quality at the steel structure factory
在钢结构厂开展钢结构加工质量培训

Employee Care

员工关怀

The Company provides comprehensive and multi-channel care for all employees, offering both material and spiritual support. We place great emphasis on enriching employees' cultural and recreational lives by organizing targeted team-building activities during major holidays in Zambia and China. These initiatives not only enhance employees' leisure time but also foster communication between Zambian and Chinese staff, boosting overall employee well-being and cultivating a cohesive and fulfilling workplace environment. Additionally, we respect local African customs and traditions by presenting holiday gifts to local employees during traditional Zambian festivals, demonstrating our sincere respect and care for the local culture through concrete actions.

本公司全方位、多渠道地关怀全体员工，为员工提供物质和精神保障。我们十分重视员工业余文化体育生活建设，在中赞两国的重大节日开展针对性的团建活动，丰富业余生活同时，增进中赞员工交流，提升员工幸福感，着力打造具有凝聚力与幸福感的职场生态。我们也尊重非洲当地的风俗文化，在赞比亚传统节日为当地员工送上节日礼品，以实际行动传递对本土文化的尊重与关怀。



The Company has established a volunteer organization focused on addressing the needs of employees living and working overseas. Through services such as policy consultation, emergency assistance, and psychological support, the organization effectively resolves employee issues, becoming a "caring home" for our overseas staff. To better support employees' daily lives abroad and bridge dietary cultural differences, the Company operates an on-site canteen that provides meals designed to be scientifically balanced and nutritionally adequate. The canteen actively gathers employee feedback on hygiene, food quality, and service management to continuously enhance service standards. During holidays, additional meal subsidies are provided to ensure overseas employees can enjoy festive specialty dishes, fostering a sense of celebration even far from home.

本公司成立志愿者组织，紧扣员工海外工作生活需求，通过政策咨询、应急援助、心理疏导等暖心服务，切实解决员工问题，将其打造为海外员工的“贴心家园”。为了更好地服务海外员工生活，并且缩短饮食文化差异，本公司设有公司食堂，并按照科学合理、营养均衡的方式进行配餐。食堂也从卫生、饭菜质量、服务管理方面积极收集员工对食堂的评价，不断提高本公司食堂的服务水平。我们还在节假日期间额外在食堂设置了加餐补助，确保海外员工能品尝到具备节日气息的特色食品。

The Company is actively creating green living environments by developing a year-round, multi-dimensional landscaping system that enhances employees' residential experience. We also plan integrated green pathways and rest areas, adding fitness facilities to allow employees to connect with nature during their commutes and breaks, promoting well-being and a positive mood. To ensure access to fresh, organic fruits and vegetables, we have established our own farms at key sites and large-scale projects, cultivating commonly used produce to enrich canteens' offerings.

本公司积极打造绿色驻地，建设“四季有景”的立体绿化体系，提升员工居住体验，同步规划绿道与休憩点，增加健身锻炼设施，让员工在通勤与休憩中亲近自然，保持良好心情。为保障员工对新鲜有机果蔬的需求，我们在各主要驻地及规模项目自建农场，种植常用蔬菜、水果，丰富食堂供应。



The Company actively built green residences
本公司积极打造绿色驻地



Zambian and Chinese employees jointly built project farms
中赞员工共同建设项目农场



We regularly hold forums for young employees and overseas staff to focus on their mental health, understand their thoughts and needs, and provide necessary support.

我们定期召开年轻员工、海外员工座谈会，关注员工心理健康状态，了解员工的想法和需要，并提供必要的支持。



Conduct a new employee symposium to learn about the psychological state of employees
开展新员工座谈会了解员工心理状态



05 | 社区篇

COMMUNITY

Guided by the principle of "extensive consultation, joint contribution, and shared benefits," the Company actively fulfills its corporate social responsibility by strengthening communication and cooperation with suppliers and industry partners to jointly build a sustainable ecosystem. Through livelihood projects, technology transfer, and skills training, we support the long-term prosperity of local communities. We promote a spirit of volunteerism and fulfill our social responsibility through cultural exchanges and charitable initiatives, effectively activating the community's internal development momentum and injecting corporate energy into the Zambia-China shared future community.

我们以“共商共建共享”原则为导向，积极履行企业社会责任，加强供应商、行业合作伙伴的沟通与合作，联合多方共建可持续生态圈；通过民生工程、技术转移、技能培训等方式助力社区长远繁荣；弘扬志愿精神，以文化交流与公益善举践行社会责任，切实激活社区发展内生动力，为中赞命运共同体建设注入企业动能。



Industry Development

行业发展

The Company adheres to a localization development strategy, striving to become a leading localized engineering firm in Zambia. By partnering with suppliers, partners, and industry associations, it aims to foster win-win cooperation and build a sustainable development ecosystem.

本公司秉持属地化发展战略，致力于成为赞比亚地区的一流属地化工程公司，携手供应商、合作方、行业协会合作共赢，建立可持续发展生态圈。

We implement the supplier management policies of 15MCC, adhering to the supplier management principles of "strict admission, classification and grading, dynamic assessment, and survival of the fittest". It continuously improves supplier selection, review, and evaluation processes to ensure the quality of procured materials, while effectively keeping environmental and social risks within the supply chain under control, thereby building a sustainable supply chain.

我们贯彻执行中国十五冶供应商管理相关制度，遵循“严格准入、分类分级、动态考核、优胜劣汰”的供应商管理原则，完善供应商筛选、审查、评估管理，保障采购物资的质量，并且确保供应链环境和社会风险的可控、在控，构建可持续供应链。

In addition, we actively participate in building industry cooperation platforms. The Chinese Mining Enterprises Association in Zambia (the "CMEAZ") was officially established in 2024 with the aim of enhancing the industry influence of Chinese mining companies, improving member companies' management capabilities in compliance, safety, and environmental protection, and promoting technological advancements in the mining sector. As a governing member of CMEAZ, the Company will work alongside CMEAZ members to advance the sustainable development of the mining industry and further contribute to Zambia's economic and social progress as well as the improvement of local livelihoods.

此外，我们积极参与搭建行业合作平台。赞比亚中资矿业企业协会（“CMEAZ”）于2024年正式成立，旨在增强中资矿企的行业影响力，提升会员企业在合规经营、安全环保等方面的管理能力，推动矿业科技的应用进步。本公司作为CMEAZ的理事单位，将与协会成员共同推进矿业行业的可持续发展，进一步推动赞比亚的经济社会发展和民生改善。



The inauguration ceremony of CMEAZ and the launch ceremony of the "3 Million Tons of Copper – Chinese Enterprises in Action" initiative

CMEAZ 成立暨“300万吨铜-中资企业在行动”启动仪式现场

Community Development

社区共建

The Company deeply understands that in the process of globalization, enterprises are not only drivers of economic growth but also key bearers of social responsibility. From livelihood projects to skills training, from education and healthcare to public services, the Company actively fulfills its corporate social responsibility by taking concrete actions to support local development and create shared prosperity. Each project not only generates employment opportunities for local residents but also promotes the community's long-term prosperity through technology transfer and resource investment.

本公司深知在全球化发展中，企业不仅仅是经济增长的推动者，更是社会责任的践行者。我们从民生工程到技能培训，从教育医疗到公共服务，积极履行企业社会责任，以实际行动支持属地的发展，共创共荣。每一个项目都不仅为属地居民创造了就业机会，更能通过技术转移与资源投入，助力社区实现长远繁荣。



Responsibility Case 责任案例

As one of the strategic overseas markets of 15MCC, Zambia's thriving mining economy has driven a significant demand for skilled technical talent. Against this backdrop, the Sino-Zam Vocational College of Science and Technology was officially established in April 2019 in Copperbelt Province, Zambia. The college houses seven specialized schools, including Mining Engineering, Mechanical Manufacturing and Automation, and Construction Engineering, building a talent development system precisely aligned with local industry needs. This institution not only represents a key achievement in the "going global" pilot program for China's non-ferrous metals vocational education but also serves as a bilateral platform for Zambia-China vocational education cooperation. Its construction and operation have received continuous and strong support from both the Zambian and Chinese governments.

To better meet the local educational development and market talent needs, the Sino-Zam Vocational College of Science and Technology required expansion and improvement of its teaching facilities. In 2023, the Company undertook the construction of a key China-aided project in Zambia—the teaching building construction project for the Sino-Zam Vocational College of Science and Technology. The project scope included the teaching building (featuring lecture halls, multifunctional classrooms, offices, stairwells, exhibition halls, and restrooms), other auxiliary buildings totaling 205 square meters, practical training classrooms covering 3,000 square meters, as well as campus roads and perimeter walls. Our responsibilities encompassed site survey and design, overall planning, construction drawing design, construction execution, and installation of supporting facilities. The project was completed and put into operation in 2024. The newly built teaching building is equipped with modern educational facilities such as practical training laboratories, significantly improving the teaching environment and enhancing the practical and technical aspects of vocational education. Furthermore, with the expanded facilities, the college can accommodate more students, especially those from rural and low-income families, providing greater access to vocational education and cultivating more skilled technical talent to support local industrial upgrading.



The new campus of Sino-Zam Vocational College of Science and Technology under construction
建设过程中的中赞职业技术学院新校区

作为中国十五冶海外业务的战略市场之一，赞比亚蓬勃发展的矿业经济催生了显著的技术人才需求。在此背景下，中赞职业技术学院于2019年4月在赞比亚铜带省正式成立，设立矿业工程、机械制造与自动化、建筑工程等七大专业分院，构建起精准对接当地产业需求的人才培养体系。该学院不仅是中国有色金属行业职业教育“走出去”试点工作的重要成果，更搭建起中赞职业教育合作的双向互通平台。其建设与营运一直备受赞比亚当地政府与中国政府部门的重视。

为了更好地适应当地教育发展和市场的人才需求，中赞职业技术学院需要进行教学楼建设、完善等。本公司于2023年承建中国援建赞比亚重点工程项目——中赞职业技术学院教学楼建安工程，涵盖教学楼（阶梯教室、多功能教室、办公室、楼梯间、展览厅、卫生间）、其他建筑（205平方米）、实训教室（3,000平方米）、学院道路围墙等项目的地勘设计、设计规划、施工图设计、施工建设、学院配套设施安装。项目于2024年完成并投入使用。新建的教学楼已配备现代化教学设施（如实训实验室等），从而改善教学环境，提高职业教育的实践性和技术性。此外，教学楼扩建后，学院可容纳更多学生，尤其是农村和低收入家庭学生，提供更多接受职业教育的机会，为当地产业升级培养更多技术型人才。



Sino-Zam Vocational College of Science and Technology after the completion of the teaching building
教学楼建安工程完工后的中赞职业技术学院

After the campus was put into use, the Company further deepened the integration of industry and education by entering into a joint training agreement with the college for heavy equipment maintenance order-based classes. Leveraging its years of engineering project experience in Zambia, the Company supports the college in cultivating local Zambian technicians specializing in riveting, welding, and mining equipment maintenance. The Company established special scholarships to incentivize outstanding academic performance and innovatively implemented an "enroll-to-employ" education model. This model offers internship positions closely aligned with industry demand, helping students transform classroom knowledge into practical skills and become familiar with real enterprise work environments in advance. Through this, the Company has built a triadic training system integrating theoretical teaching, on-site practical training, and enterprise internships. By combining campus recruitment, cooperative education, and social hiring, the Company advances its localized talent strategy, promotes local employment, and enhances the professional technical skills of Zambian personnel, gradually building a stable and highly skilled local technical workforce.

在校区投入使用后，我们进一步深化产教融合，与校方签订了重型设备维修订单班联合培养协议，凭借我们在赞比亚运营多年的工程项目经验，助力学院培养铆、焊、矿山设备维修等专业的赞比亚当地技工。我们设置专项奖学金，激励学业表现优异的学生，并创新实施“招生即招工”的育人模式，设置与行业需求紧密贴合的实习岗位，帮助学生将课堂所学转化为实操能力，提前熟悉企业真实工作场景，构建起“理论教学、基地实训、企业实习”三位一体的培养体系。由此，我们通过校园招聘、合作办学、社会招聘相结合的形式推进属地化人才战略，促进当地就业并提升赞比亚人员的专业技术技能，逐步建设一支稳定且具备较高技术水平的属地化技工队伍。



The Company signed a joint training agreement with the school for heavy equipment maintenance order-based classes
本公司与校方签署重型设备维修订单班联合培养协议



Graduation ceremony of Sino-Zam Vocational College of Science and Technology in 2024
中赞职业技术学院2024年毕业典礼



Responsibility Case 责任案例

In Zambia's Gwembe District of the Southern Province, medical and educational facilities are concentrated mainly in the county seat, while the surrounding villages are widely dispersed. Some remote villages are located over 20 kilometers from the county center and require traversing rugged mountain roads, making transportation extremely difficult. Due to these geographical constraints, local residents have long faced challenges in accessing medical care and education, with urgent needs to improve the accessibility of basic education and healthcare services.

The Company has always been deeply committed to the well-being and development of the local community and has proactively taken on corporate social responsibility. In 2023, the Company undertook two major livelihood projects in Gwembe District, Southern Province: the construction of a school classroom and a clinic, addressing the urgent issues of education and healthcare access for local residents. In August 2023, after the dedicated efforts of all construction personnel, the Company completed the school project ahead of the clinic and handed it over to the local government, providing children with a high-quality learning environment. Seven months later, the Company officially handed over the clinic, which has become the only clinic currently serving the area. The completion of these two vital projects has directly benefited 1,250 households in surrounding villages, providing modern educational facilities for school-age children and resolving critical healthcare access challenges for residents.

The successful completion of these two projects not only addressed the practical difficulties faced by local residents but also exemplifies the Company's mission of "harmony with society" and its strong sense of social responsibility. We firmly believe that through continuous effort and relentless dedication, the Company will contribute even more to building a more harmonious and prosperous society.

赞比亚南方省格温贝地区医疗教育设施仅集中于县城，辖内村落分布较为分散，其中部分偏远村落距县中心逾 20 公里，且需翻越崎岖山路，交通条件极为不便。受此地理条件制约，当地村民长期面临就医难、求学难等民生难题，基础教育与基础医疗服务可及性亟待提升。

我们始终心系属地民生发展，主动承担起企业责任，于 2023 年承建南方省格温贝县学校教室及诊所两大民生项目，帮助当地居民解决求学难、就医难的问题。2023 年 8 月，经过全体建设人员辛勤努力，学校项目率先竣工并移交当地政府，为孩子们创造了优质的学习环境。时隔 7 个月后，诊所项目也正式移交，成为当地目前唯一一家诊所。两大民生工程相继落成，使周边村庄 1,250 户家庭直接受益——适龄儿童获得现代化教学场所，居民就医难题也得到解决。

这两个项目的顺利完成，不仅解决了当地居民的实际困难，更体现了我们“与社会共和谐”的使命和强烈的社会责任感。我们坚信通过持续的努力和不懈的奋斗，为构建更加和谐美好的社会贡献更多的力量。



The completed school in Gwembe District, Southern Province
建成后的南方省温贝县学校



Zambian Minister of Education, Douglas, attended the ribbon-cutting ceremony for the handover of schools in Gwembe District
赞比亚教育部长道格拉斯出席格温贝县学校交接剪彩



The clinic in Gwembe District during construction
施工过程中的格温贝县诊所



The completed clinic in Gwembe District
建成后的格温贝县诊所

Dedication and Donation

爱心奉献

The Company upholds the volunteer spirit of "dedication, friendship, mutual assistance, and progress," caring deeply for local residents and understanding the needs of the community. We actively carry out charitable donations, medical assistance, and other support initiatives, strengthening the friendship between the Zambian and Chinese people, and building a bridge for cross-cultural communication through volunteerism.

本公司弘扬“奉献、友爱、互助、进步”的志愿精神，心系当地居民，了解当地社区所需，积极开展公益捐赠、医疗援助等爱心帮扶行动，深化中赞人民友谊，以志愿精神架起跨文化沟通的桥梁。



Responsibility Case 责任案例

Due to aging facilities, the Kalulushi General Hospital in Zambia has seen a direct impact on its medical service capacity. In response to community needs, the Company promptly launched a special assistance initiative, donating construction materials valued at RMB50,000 to support the hospital's infrastructure upgrade. In November 2024, the Company completed the donation to Kalulushi General Hospital, with the Mayor of Kalulushi personally receiving the materials on-site and highly praising the Company for setting a leading example.

赞比亚的卡鲁鲁西中心医院因设施老化，已直接影响到其医疗服务能力。本公司积极响应社区需求，迅速启动专项援助行动，捐赠价值 5 万元人民币的建筑材料，以切实行动支持医院基础设施升级工程。2024 年 11 月，我们向卡鲁鲁西中心医院完成了物资捐赠，卡鲁鲁西市市长亲临现场接收捐赠物资，并高度赞扬本公司率先做出了表率。

This donation not only reflects our ongoing commitment to the local healthcare sector but also highlights our role as a Chinese enterprise in Zambia dedicated to serving community development and fulfilling corporate social responsibility.

此次捐赠不仅体现我们对当地医疗卫生事业的持续关注，更彰显了作为驻赞中资企业服务社区发展、践行企业社会责任的担当。



Donated supplies to Kalulushi General Hospital in Copperbelt Province, Zambia
向赞比亚铜带省卡鲁鲁西地区医院捐赠物资



Independent Assurance Statement

独立审验声明

CECEP (HK) Advisory Company Limited ("CECEPAC (HK)" or "We") has been engaged by 15MCC Africa Construction and Trading Co., Ltd ("15MCC Africa Company", or the "Company"), to conduct an independent limited assurance engagement ('Assurance Engagement') on the information and data related to sustainable development in 15MCC Africa Company FY 2024 Sustainability Report (the "Report"), and disclosed the results and conclusions of the Assurance Engagement to the intended users of the Report in the form of an independent assurance statement.

中国节能皓信（香港）咨询有限公司（“中国节能皓信（香港）”、“我们”）接受十五冶非洲建筑贸易有限公司（“十五冶非洲公司”）的委托，对十五冶非洲公司《2024 年度可持续发展报告》（“《报告》”）中披露的有关可持续发展的资料执行独立有限审验工作（“审验工作”），并以发表独立审验声明的形式向《报告》的使用者披露审验结果及结论。

CECEPAC (HK) has been engaged to assure 15MCC Africa Company's adherence to the four AA1000 Accountability Principles of Inclusivity, Materiality, Responsiveness and Impact set out in the AA1000 Assurance Standard v3 ("AA1000AS v3").

Should there be any discrepancies or differences between the Chinese and English versions of the independent assurance statement, the Chinese version shall prevail.

中国节能皓信（香港）根据《AA1000 审验标准 v3》（“AA1000AS v3”），对十五冶非洲公司对包容性、实质性、回应性及影响性这四项 AA1000 审验原则的遵循情况进行审验。

如本审验声明的中文版与英文版之间有任何抵触或不相符之处，则请以中文版为准。

I.Independence and Competence

一、独立性与能力

CECEPAC (HK) was not involved in collecting and calculating data involved in the Report, or in the development of the Report. CECEPAC (HK)'s activities of Assurance Engagement are independent from 15MCC Africa Company. There is no relationship between CECEPAC (HK) and 15MCC Africa Company beyond the contractual agreement for providing proper service of assurance.

CECEPAC (HK)'s assurance team consists of professional personnel who are experienced in the industry and have received professional training in sustainability-related standards such as Global Reporting Initiative Sustainable Reporting Standards ("GRI Standards") issued by Global Reporting Initiative ("GRI"), AA1000AS v3, ISO 14001, ISO 9001, etc.

CECEPAC (HK)'s assurance team has rich experience in conducting assurance and has a full understanding and practical ability of AA1000AS v3. Meanwhile, the assurance team of CECEPAC (HK) carries out assurance work on sustainable development issues in accordance with the internal assurance protocol of CECEPAC (HK).

中国节能皓信（香港）没有参与收集和计算《报告》内的数据或编撰《报告》。中国节能皓信（香港）进行的审验工作独立于十五冶非洲公司。除了审验合约订明的合适服务，中国节能皓信（香港）与十五冶非洲公司没有其他联系。

中国节能皓信（香港）的审验团队由行业内经验丰富的专业人士组成。相关人士接受过如全球可持续发展标准委员会发布的《可持续发展报告标准》（“GRI 标准”）、AA1000AS v3、ISO 14001、ISO 9001 等可持续发展相关标准的专业培训。

中国节能皓信（香港）的审验团队拥有进行审验工作的丰富经验，并且对 AA1000AS v3 具有充分的理解和实践能力，同时依据中国节能皓信（香港）的内部审验规定开展可持续发展事宜的审验工作。

II.15MCC Africa Company's Responsibilities

二、十五冶非洲公司责任

15MCC Africa Company is responsible for the preparation and presentation of the Report with reference to GRI Standards. 15MCC Africa Company is also responsible for implementing internal control procedures to ensure that the contents of the Report are free from material misstatement, whether due to fraud or error.

十五冶非洲公司的责任是参考 GRI 标准编制其《报告》。十五冶非洲公司亦负责并实施相关内部控制流程，以使《报告》不存在由于欺诈或错误导致的重大错误陈述。

III.Assurance Provider's Responsibilities

三、审验机构责任

CECEPAC (HK) is responsible for issuing an independent assurance statement according to AA1000AS v3 and GRI Standards issued by GRI to 15MCC Africa Company. This independent assurance statement applies solely to the Report in the specified scope, expresses a conclusion on the assurance work, and does not serve any other intent or purpose.

CECEPAC (HK) ensures that all personnel involved in assurance work meet professional qualification, training, and experience requirements, and are proficient in conducting Assurance Engagement. All results of assurance and certification audit are internally reviewed by senior staff to ensure that methodologies used in the process are sufficiently stringent and transparent.

IV.Scope of the Assurance Engagement

四、审验范围

- The scope of the Assurance Engagement is limited to the information in the Report that related to 15MCC Africa Company, and does not include 15MCC Africa Company's suppliers, contractors and information provided by other third parties;
- AA1000AS Type 1 Moderate Level of Assurance was adopted to evaluate the nature and extent of 15MCC Africa Company's adherence to the four AA1000 Accountability Principles (Inclusivity, Materiality, Responsiveness and Impact) set out in the AA1000AS v3;
- The Assurance Engagement was with respect to information disclosed from January 01, 2024 to December 31, 2024 only. Any information that falls outside this period that is disclosed in the Report is not included within the scope of the Assurance Engagement. Therefore, we do not express any conclusions on this information; and

中国节能皓信（香港）的责任是根据 AA1000AS v3 及 GRI 标准向十五冶非洲公司出具独立审验声明。此独立审验声明仅作为对下列十五冶非洲公司《报告》中所界定范围内的相关事项进行审验之结论，而不作为其他之用途。

中国节能皓信（香港）确保参与审验工作的人员符合专业资格、培训和经验要求，并具有实施审验的能力。所有核实和认证审核的结果均由资深人员进行内部评审以确保我们所使用的方法是严谨和透明的。

- 审验的范围限于《报告》涵盖的十五冶非洲公司的信息，不包括十五冶非洲公司的供应商、承包商以及其他第三方的信息；
- 采用 AA1000AS 类型 1 中度审验等级用以评估十五冶非洲公司遵循 AA1000AS v3 阐明的四项 AA1000 审验原则（包容性、实质性、回应性及影响性）的性质和程度；
- 审验的时间范围仅限于 2024 年 1 月 1 日至 2024 年 12 月 31 日的资料，对于此时间范围外的资料或在《报告》中所包括的任何其他资料均不在我们的审验工作范围内，因此我们不就此等信息发表任何结论；以及



IV.Scope of the Assurance Engagement

四、 审验范围

- The scope of the Assurance Engagement is confined to the information provided by 15MCC Africa Company. Any queries regarding the content or related matters within this independent assurance statement should be addressed to 15MCC Africa Company only.
- 审验范围乃基于并局限于十五冶非洲公司提供的资讯内容。对于本独立审验声明所载内容或相关事项之任何疑问， 将由十五冶非洲公司一并回复。



V.Methodology of the Assurance Engagement

五、 审验方法

- CECEPAC (HK)'s Assurance Engagement was conducted at 15MCC Africa Company, and the work included:
- Evaluating the appropriateness of 15MCC Africa Company's stakeholder engagement process;
 - Conducting online interviews with 15MCC Africa Company's employees involved in sustainability management, preparation of the Report and the provision of relevant information;
 - Collating and evaluating evidence that supports the extent to which 15MCC Africa Company adheres to the AA1000AS v3 principles;
 - Assessing whether the reporting and management approach disclosed for the Report responded to the principles of Inclusivity, Materiality, Responsiveness and Impact as defined in the AA1000AS v3; and
 - Performing other procedures we deemed necessary.
- 中国节能皓信（香港） 仅在十五冶非洲公司开展审验工作， 工作内容包括：
- 评估十五冶非洲公司的利益相关方参与过程的合适性；
 - 与十五冶非洲公司可持续性管理 、《报告》 编制及提供有关信息的员工进行线上访谈；
 - 整理和评估能够支持十五冶非洲公司遵循 AA1000AS v3 原则的程度的证据资料；
 - 审验《报告》 的编制与管理流程是否按照 AA1000AS v3 阐明的包容性、 实质性、 回应性及影响性原则进行； 以及
 - 我们认为必要的其他工作。

Assurance Engagement was performed and the conclusions within were based upon information and data provided to CECEPAC (HK) by 15MCC Africa Company and on assumptions that the information provided was complete and accurate.

审验工作基于十五冶非洲公司提供予中国节能皓信（香港） 的相关信息所作成之结论， 并确保其所提供的信息是完整及准确的。



VI.Limitations

六、 局限性

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities.

由于非财务资料未有国际公认和通用于评估和计量的标准， 故此不同但均为可接受的信息和计量技术应用或会影响与其他机构的可比性。



VII.Conclusions

七、 结论

In accordance with the principles of Inclusivity, Materiality, Responsiveness and Impact in the AA1000AS v3, our findings and conclusions are as follows:

针对 AA1000AS v3 中包括的包容性、 实质性、 回应性及影响性原则的审验发现和结论如下：

Inclusivity

包容性

15MCC Africa Company has identified key stakeholders and continuously communicated with key stakeholders in various ways to understand their expectations and concerns. On this basis, 15MCC Africa Company has formulated policies in consideration of key stakeholders' expectations and concerns. Our professional opinion is that 15MCC Africa Company adheres to the principle of Inclusivity.

十五冶非洲公司识别了主要利益相关方， 透过不同的方式持续与主要利益相关方沟通， 并了解他们的期望与关注重点。 十五冶非洲公司亦透过此基础考虑了主要利益相关方的期望和对主要利益相关方的影响以制定相关政策。 我们的专业意见认为， 十五冶非洲公司遵循包容性原则。

Materiality

实质性

15MCC Africa Company has conducted assessments of material topics for the Report, collected the opinions of key stakeholders, identified material topics through appropriate methods, and presented the results of assessments of material topics in its Report. Our professional opinion is that 15MCC Africa Company adheres to the principle of Materiality.

十五冶非洲公司为其《报告》 进行了实质性议题分析， 收集了主要利益相关方的意见， 透过合适的方法识别出实质性议题， 并于其《报告》 中展示了实质性议题的评估结果。 我们的专业意见认为， 十五冶非洲公司遵循实质性原则。

Responsiveness

回应性

15MCC Africa Company has established relevant communication channels with its key stakeholders to collect their concerns and responded to the key stakeholders on material topics related to sustainability. Our professional opinion is that 15MCC Africa Company adheres to the principle of Responsiveness.

十五冶非洲公司对其主要利益相关方建立了相关的沟通渠道以收集其关注的事宜， 并就可持续发展相关的实质性议题对主要利益相关方作出了回应。 我们的专业意见认为， 十五冶非洲公司遵循回应性原则。

Impact

影响性

In its ESG risk management system, 15MCC Africa Company has established a process to understand, measure, assess and manage impacts. 15MCC Africa Company carried out a regular corporate significant risk evaluation to identify and rank related risks based on their significance levels. Our professional opinion is that 15MCC Africa Company adheres to the principle of Impact.

十五冶非洲公司在其可持续发展风险管理机制中建立了理解、 衡量、 评价和管理影响的流程， 定期开展了企业重大风险研判， 识别出了相关的风险并对相关结果进行排序。 我们的专业意见认为， 十五冶非洲公司遵循影响性原则。



July 31, 2025
2025 年 7 月 31 日

Hong Kong, China
中国香港

GRI Standards Index

GRI 标准索引

Explanation 使用说明	15MCC Africa Company has reported with reference to the GRI Standards for the period January 1, 2024, to December 31, 2024. 十五冶非洲公司在 2024 年 1 月 1 日至 2024 年 12 月 31 日参照 GRI 标准，报告了在此份 GRI 内容索引中引用的信息
Version of GRI 1 使用的 GRI 1	GRI 1: Foundation 2021 GRI 1：基础 2021

GRI index GRI 标准	Explanation 披露项	Location 回应章节
GRI 2: General Disclosures 2021 GRI 2：一般披露 2021	2-1 Organizational details 2-1 组织详细情况	About Us 关于本公司
	2-2 Entities included in the organization's sustainability reporting 2-2 纳入组织可持续发展报告的实体	About Us 关于本公司
	2-3 Reporting Period, frequency and contact point 2-3 报告期、报告频率和联系人	About this Report 关于本报告
	2-4 Restatements of information 2-4 信息重述	About this Report 关于本报告
	2-6 Activities, value chain, and other business relationships 2-6 活动、价值链和其他业务关系	About Us 关于本公司
	2-7 Employees 2-7 员工	Employee 员工篇
	2-8 Workers who are not employees 2-8 员工之外的工作者	Emergency Support; 应急保障； Ecological Protection 生态保护
	2-22 Statement on sustainable development strategy 2-22 关于可持续发展战略的声明	About Us; 关于本公司； ESG Management ESG 管理

GRI index GRI 标准	Explanation 披露项	Location 回应章节
GRI 2: General Disclosures 2021 GRI 2：一般披露 2021	2-25 Processes to remediate negative impacts 2-25 补救负面影响的程序	Compliant Operation 合规运营
		Compliant Operation; 合规运营； Quality Management; 质量管理； Emergency Support; 应急保障；
	2-27 Compliance with laws and regulations 2-27 遵守法律法规	Green Operation; 绿色运营； Ecological Protection; 生态保护； Employee Rights and Interests 员工权益
	2-29 Approach to stakeholder engagement 2-29 利益相关方参与的方法	Stakeholder Engagement 利益相关方沟通
	3-1 Process to determine material topics 3-1 确定实质性议题的过程	Assessment of Material Topics 实质性议题评估
	3-2 List of material topics 3-2 实质性议题清单	Assessment of Material Topics 实质性议题评估
	3-3 Management of material topics 3-3 实质性议题的管理	Assessment of Material Topics 实质性议题评估
	303-1 Interaction between organizations and water (as a shared resource) 303-1 组织与水（作为共有资源）的相互影响	Green Operation 绿色运营
	303-2 Management and drainage related impacts 303-2 管理与排水相关的影响	Green Operation 绿色运营
	306-1 Waste generation and significant impacts related to waste 306-1 废弃物的产生及废弃物相关重大影响	Green Operation 绿色运营
	306-2 Management of significant impacts related to waste 306-2 废弃物相关重大影响的管理	Green Operation 绿色运营

GRI index GRI 标准	Explanation 披露项	Location 回应章节
GRI 401: Employment 2016 GRI 401：雇佣 2016	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee Rights and Interests; 员工权益；
	401-2 提供给全职员工（不包括临时或兼职员工）的福利	Employee Care 员工关怀
GRI 403: Occupational Health and Safety 2018 GRI 403：职业健康与安全 2018	403-1 Occupational health and safety management system	Occupational Health and Safety 职业健康与安全
	403-1 职业健康安全管理体系	
	403-2 Hazard identification, risk assessment, and incident investigation	Emergency Support; 应急保障；
	403-2 危害识别、风险评估和事件调查	Occupational Health and Safety 职业健康与安全
	403-3 Occupational health services	Occupational Health and Safety 职业健康与安全
	403-3 职业健康服务	
	403-5 Worker training on occupational health and safety	Emergency Support; 应急保障；
	403-5 工作者职业健康安全培训	Occupational Health and Safety 职业健康与安全
	403-6 Promotion of worker health	Occupational Health and Safety 职业健康与安全
	403-6 促进工作者健康	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Emergency Support; 应急保障；
	403-7 预防和减轻与商业关系直接相关的职业健康安全影响	Occupational Health and Safety 职业健康与安全
	403-8 Workers covered by an occupational health and safety management system	Emergency Support; 应急保障；
	403-8 职业健康安全管理体系适用的工作者	Occupational Health and Safety 职业健康与安全

GRI index GRI 标准	Explanation 披露项	Location 回应章节
GRI 403: Occupational Health and Safety 2018 GRI 403：职业健康与安全 2018	403-9 Work-related injury	Emergency Support 应急保障
	403-9 工伤	
GRI 404: Training and Education 2016 GRI 404：培训与教育 2016	403-10 Work-related ill health	Emergency Support; 应急保障；
	403-10 工作相关的健康问题	Occupational Health and Safety 职业健康与安全
GRI 405: Diversity and Equal Opportunities 2016 GRI 405：多元化与平等机会 2016	404-2 Programs for upgrading employee skills and transition assistance programs	Training and Development 培训与发展
	404-2 员工技能提升方案和过渡协助方案	
GRI 413: Local Community 2016 GRI 413：当地社区 2016	405-1 Diversity of governance bodies and employees	Employee Rights and Interests 员工权益
	405-1 治理机构与员工的多元化	
GRI 414: Supplier Social Assessment 2016 GRI 414：供应商社会评估 2016	413-1 Operating point with local community participation, impact assessment, and development plan	Topic: Highlight Projects of the "Belt and Road Initiative"; 专题：“一带一路”亮点项目；
	413-1 有当地社区参与、影响评估和发展计划的运营点	Community 社区篇
GRI 416: Customer Health and Safety 2016 GRI 416：客户健康与安全 2016	414-1 New suppliers that were screened using social criteria	Industry Development 行业发展
	414-1 使用社会标准筛选的新供应商	
GRI 416: Customer Health and Safety 2016 GRI 416：客户健康与安全 2016	414-2 Negative social impacts in the supply chain and actions taken	Industry Development 行业发展
	414-2 供应链对社会的负面影响以及采取的行动	
GRI 416: Customer Health and Safety 2016 GRI 416：客户健康与安全 2016	416-1 Assessment of the health and safety impacts of product and service categories	Quality Management 质量管理
	416-1 对产品和服务类别的健康与安全影响的评估	

读者意见反馈表

Thank you for your time to read the 2024 Sustainability Report of 15MCC Africa Construction and Trading Co., Ltd. We would appreciate it if you could send us your suggestions to help us improve our work performance

您好！感谢您阅读《十五冶非洲建筑贸易有限公司 2024 年度可持续发展报告》，我们在此诚挚地邀请您对本报告提出宝贵的意见和建议，以帮助改善我们的工作。

针对下列问题，请在适当处勾选您的选择

1. 您对本报告对总体满意度评价

2. 本报告完整地回应、披露了利益相关方的议题

3. 本报告披露的信息及资料清晰、准确、完整

4. 本报告全面、准确地反映十五冶非洲公司对社会与环境的重大影响

5. 本报告的逻辑主线、语言文字、版式设计条理清晰、可读性强

请您对以下问题作出简要回答

1. 在本报告披露的内容中，您最关心或最满意的部分有哪些？

2. 本报告是否存在您所关注却尚未披露的内容？

3. 针对本报告，您是否有其他意见或建议？

您可以通过邮寄、电子邮件或传真的方式对问卷进行回馈，亦可直接来电说明。我们将充分考虑您的意见和建议。

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