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2024 ESG (ENVIRONMENTAL SOCIAL AND GOVERNANCE) AND SUSTAINABILITY REPORT







# AND SUSTAINABILITY REPORT

## **Board Statement**

In line with our commitment to sustainability, the Board of Directors integrates ESG principles into the Company's daily operations. We are dedicated to continually enhancing our ESG governance framework and driving MCC's high-quality growth. As the highest decision-making body for ESG matters, the Board is responsible for leading and supervising the Company's ESG strategy, overseeing the development of the Company's ESG strategy, monitors any ESG issues that could impact our business, shareholders, and other stakeholders, and regularly reviewing the progress toward meeting ESG goals. Referring to the Working Rules of the *Sustainable Development Committee*, the members of the Sustainable Development Committee regularly review the Company's sustainable development (including ESG) objectives, strategies, plans, and major decisions to ensure continuous improvement in sustainability performance. In 2024, we enhanced our sustainability governance structure, examined double materiality, broke down key ESG issues, and strengthened our approach to meeting our responsibilities. This has allowed us to build a more stable, accurate, and efficient strategy, contributing to stronger and more sustainable development.

material omissions.



The Board of Directors, along with all of its members, confirms that this report is accurate and does not contain any false information, misleading statements, or

## Contents

Board Statement	01
About This Report	04
Message from the Chairman	06
About MCC	08
Double Materiality Assessment of Topics	14
ESG Governance Framework	17
Topic—Anchoring the goal	20

Topic—Anchoring the goal of "One goal, Two best, Five strengths" to promote the re-transformation and upgrading of the Company

Outlook for 2025	76
Key Performance Indicators	78
Index of SSE	86
Feedback Form	96

## ENVIRONMENTAL

01

### Green Leadership and Ecological Co-Development

Environmental Protection	26
Addressing Climate Change	32
Develop Green Business	34

### Technological Innovation and Quality Co-Building

SOCIAL

Leading Technological Innovation	40
Quality and Safety Assurance	44
Promoting Talent Growth	52
Making More Social Contributions	58

## GOVERNANCE

### Robust Operation and Shared Responsibility

03

Implementing Corporate Governance	66
Strengthening Risk Management	68
Upholding Business Ethics	70
Information Security and Privacy Protection	73
Committed to Digital and Intelligent Empowerment	74





This report is a true reflection of MCC's economic, environmental, and social responsibility practices. All data and information in this report are based on the Company's official documents, statistical reports, or a summary and statistics of the social responsibility practices of its subsidiaries. The financial data are from the Company's financial report for the year 2024, and other data sources are primarily from 2024, with appropriate reference to data from previous years. Unless specified, the monetary amounts shown in this report are all presented in RMB.

This report is available in Simplified Chinese, Traditional Chinese, and English. In case of discrepancies among the three languages, the Simplified Chinese version shall prevail. The report is released to readers in both environmentally friendly printed form and as a PDF file, which can be downloaded from the website of MCC

If you have any questions about this report, please contact us by email or phone.

Corporate Culture Department



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## Message from the Chairman

When a thousand sails set forth, only the pragmatic take the lead; when a journey spans ten thousand miles, only the innovative prevail.

Chen Jianguang Vice President and Member of Party Leadership Group, China Minmetals Chairman of MCC Group and MCC, Secretary of Party Committee of MCC Group

许吃

As MCC releases its 16th ESG (Environmental, Social, and Governance) and Sustainability Report, we sincerely thank our stakeholders for their continued support and dedication!

As seasons change, prosperity endures. The year 2024 marks the 75th anniversary of the People's Republic of China and is pivotal for achieving the 14th Five-Year Plan goals. Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, MCC has fully implemented the directives of the 20th National Congress of the Communist Party of China, as well as the Second and Third Plenary Sessions of the 20th Central Committee. We closely followed the decisions of the CPC Central Committee and the State Council, focused on high-quality development, tackled various challenges, and advanced corporate transformation, driving steady progress in sustainable growth.

#### Growth fueled our confidence, and value defined our

**mission.** We upheld high standards in studying and promoting Party discipline, strengthened grassroots foundations, and further integrated party building with production and management. This approach has yielded notable outcomes, ensuring party leadership continues to drive high-quality development. Staying focused on our core mission, we optimized and strengthened our "one core, two subjects, and five characteristics" system, enhancing our core strengths and competitiveness. Despite unexpected challenges, we maintained business stability by pursuing progress while ensuring steady operations. In 2024, MCC signed contracts worth RMB 1,248.71 billion, achieved revenue of RMB 552.03 billion, and recorded a total profit of RMB 9.255 billion. The Company's brand recognition has grown significantly, with its overseas credit rating upgraded from BBB+ to A-, marking its first entry into the A-level credit category. In the 2024 ENR "Top 250 Global Contractors" ranking, MCC ranked fifth globally and second in industrial construction. We have remained in the global top ten for 16 consecutive years and the top five for two years in a row.

## Perseverance built our momentum, and dedication to national strategies showcased our responsibility. MCC

actively supported major regional initiatives, maintaining a strong presence in key areas such as Beijing-Tianjin-Hebei, the Yangtze River Delta, the Guangdong-Hong Kong-Macao Greater Bay Area, and Xiong'an New Area. We contributed to the "Three Major" projects and applied the "Five-Linkage" strategy to enhance our competitive edge. Some of our notable projects include the Guangzhou Lingtou Urban Renewal Project, the Chongging Hub Port Industrial Park Advanced Electromechanical Equipment and Logistics Industrial Park Project, and the Shenzhen Tongsheng Power Transmission and Transformation Engineering Utility Tunnel EPC Project. Upholding open collaboration and mutual benefit, MCC worked alongside countries under the Belt and Road Initiative (BRI), securing contracts for flagship projects such as the Sentosa Waterfront Hotel General Contracting Project in Singapore and the Phase III Blast Furnace Project for Malaysia's Eastern Steel Group, further strengthening its global brand presence. In 2024, BRI projects accounted for 91.57% of our total overseas contract value for projects under construction.

### Innovation fueled our ambition, adding new momentum to the development of advanced productive forces.

MCC refined its technological innovation system around the "Five Focuses," gaining approval from the State-owned Assets Supervision and Administration Commission (SASAC) as the "Source of Original Technologies for Metallurgical Industry Pollution Control." We also established five new provincial and ministerial-level innovation platforms. We accelerated the industrialization of scientific achievements, making breakthroughs in rock cavern hydrogen storage and molten salt energy storage. Meanwhile, we continued to deliver high-quality technological outcomes, winning three National Science and Technology Awards, one China Patent Silver Award, and three China Patent Excellence Awards. Committed to innovation, MCC accelerated the construction of smart factories and intelligent construction sites, driving the digital transformation of traditional industries such as metallurgy and construction. We actively participated in the "9+6" strategic emerging industries, using our strengths to move into high-value sectors. This included advancing mineral resources, engineering services, new materials, high-end equipment, and energy and environmental protection, driving both the evolution of traditional industries and the growth of new ones. Committed to sustainability, MCC integrated carbon reduction, pollution control, ecological restoration, and economic growth. We built a low-carbon technology system for the steel industry, initiated zero-carbon building projects, and promoted ecological reclamation and mine restoration. These efforts brought more "Green" innovations to social and economic development and more "Golden" opportunities for ecological progress.

### Reform empowered our courage, and governance innovation showcased our unique strengths. MCC advanced state-

owned enterprise (SOE) reform, strengthening its role as a model enterprise. Nine "Technology Reform Enterprises" and "Double Hundred Enterprises" excelled once again in SASAC's specialized assessment. We also expanded our strategic emerging enterprises, growing the number of national-level "Single Champion" manufacturers to six and "Specialized, Refined, Unique, and Innovative (SRUI) Little Giants" to ten. MCC accelerated the construction of its "Digital Enterprise Brain", digital oversight through advancements in the treasury system and digital management platform. Our corporate governance framework gained wide recognition, earning an A-rating for information disclosure from the Shanghai Stock Exchange for the eighth consecutive year. Additionally, MCC received prestigious accolades from the Listed Companies Association, including the "Best Practice Case for the Board of Directors", "Best Practice Case for Sustainable Development", "Best Practice Case for the Belt and Road Initiative", and the "Shanghai Stock Exchange Golden Quality Corporate Governance Award".

#### Responsibility upheld our integrity, and social commitment strengthened our impact. At MCC, we focused on people-

centered development, measuring our success by how much

Message from the Chairman



we contributed to community well-being. We consistently stood at the forefront of disaster relief, leveraging our professional expertise to conduct post-disaster safety assessments and reconstruction efforts, actively fulfilling our duty as a central enterprise to safeguard lives and property. MCC also advanced rural revitalization by encouraging industrial growth, improving infrastructure, and supporting local consumption. We helped local specialty products reach broader markets, ensuring that revitalization efforts were sustainable and impactful. Globally, MCC embraced its corporate citizenship by engaging in philanthropy projects focused on education, healthcare, and social welfare. We remained committed to growing alongside governments, fostering harmony with local communities, and supporting our employees. Notably, our "Peach & Pear Delight" rural revitalization project and "Ramu Nickel Project" were recognized for their excellence in social responsibility and overseas ESG practices. We also prioritized the growth of industrial workers by offering training and education programs that boosted professional skills. This helped migrant workers shift from "labor-intensive employment" to "skill-based development".

When a thousand sails set forth, only the pragmatic take the lead; when a journey spans ten thousand miles, only the innovative prevail. MCC will press forward with determination, embracing challenges and delivering tangible results. Anchored in the "One Goal, Two Best, Five Strengths" vision, the Company will advance the "Four Stabilities and Eight Progressions" strategy, setting the stage for a new phase of transformation and growth. We will strengthen our focus on technological innovation, industrial control, and national security support. Our aim is to strive for excellence, to give back to society, reward shareholders, and improve the lives of our employees. With unwavering commitment, the Company will contribute its strength to the great journey of Chinese modernization.

## **About MCC**

### **Corporate Profile**

Metallurgical Corporation of China Limited (MCC) is a major state-owned construction conglomerate affiliated with China Minmetals. With a remarkable legacy spanning over 70 y ears, MCC's journey began in 1948 during the restoration of Ansteel and Fushun Mining in Northeast China, where it established New China's first metallurgical construction teams. Over the decades, MCC has built a strong foundation in research and development, surveying, design, and construction. Since then, MCC has been a key player in China's major steel projects, including WISCO, Baotou Steel, TISCO, Pangang, and Baosteel, earning its place as a major force in China's steel industry.

In recent years, MCC has focused on its strategy of "One Goal, Two Bests, and Five Strengths", aspiring to become a worldclass enterprise with global competitiveness. The Company focuses on becoming the go-to provider for comprehensive metallurgical construction solutions and the most trusted partner for high-quality infrastructure projects both in China and abroad. MCC is committed to driving value through innovation, market competitiveness, resource management, and cultural influence.

In response to the construction industry's trends toward "digitalized enterprise management, factory-like production

of products, and industrialized workforce", MCC is guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. It remains committed to high-quality development, and has implemented the "Five Core Essentials" for achieving to vision of "One Goal, Two Bests, and Five Strengths". It strives to cultivate new growth areas, build new competitive advantages, and unleash new driving forces. By enhancing its core functions and strengthening its core competitiveness, the Group is continuously driving its transformation and paving the way to become a world-class investment and construction group.

MCC was listed on the Main Board of the Shanghai Stock Exchange on September 21, 2009, and on the Main Board of the Hong Kong Stock Exchange on September 24, 2009.

By the end of 2024, the Company's A-shares continued to be listed in indices such as the SSE Central State-owned Enterprises Index, MSCI Ming Sheng Concept Index, SSE 180 Stability Index, and 300 Innovation Index, and its H-shares had been included in the Hang Seng Composite Index, Shanghai-Hong Kong Stock Connect, Shenzhen-Hong Kong Stock Connect, Bloomberg ESG Data Index and so on.

### **⊡** 2024







#### **Oualification & Certification** Γ

#### Honors of MCC БЪ,

### The quantity and quality of high-level qualifications rank among the top in the national construction industry Enterprises with Enterprises with Engineering Design Special Qualification for 5 Integrated Class-A General Contracting of Qualification Construction Enterprises with Special Qualification for General Contracting of Construction in four areas Enterprises with Engineering Supervision Enterprises with Integrated Qualification Special Qualification for $\mathbf{\mathbf{x}}$ General Contracting of Construction in three areas Enterprises with Enterprises with Special Qualification for Engineering Investigation General Contracting of Integrated Class-A Construction in two areas Qualification **MCC headquarters Qualification for Qualification for General Contracting of** General Contracting of **Building Construction Highway Construction** Grade I Grade II





Won the 7<sup>th</sup> New Fortune "Best IR Hong Kong-Listed Company" Award issued by Huatai Securities

Listed in the Best Examples of **Sustainable Development Practices** in 2024 by the China Association for **Public Companies** 

Won 3 State Science and Technology Awards issued by The State Council of the People's Republic of China

Won 4 awards in the 20<sup>th</sup> Tien-yow Jeme Civil Engineering Prize issued by the China Civil Engineering Society

Won 21 Metallurgical Science and Technology Awards in 2024 issued by the China Iron and Steel Association and the Chinese Society for Metals

Listed in the "2024 Best Practice for **Boards of Listed Companies**" by the China **Association for Public Companies** 

## **Organizational Structure**



### **Subsidiaries**

NO.	Name of subsidiaries	Short form
1	Central Research Institute of Building and Construction Co., Ltd.	CRIBC
2	Beijing Metallurgical Equipment Research Design Institute Co., Ltd.	MCCE
3	China ENFI Engineering Co., Ltd.	China ENFI
4	Capital Engineering & Research Incorporation Ltd.	CERI
5	CISDI Group Co., Ltd.	CISDI
6	WISDRI Engineering & Research Incorporation Limited	WISDRI
7	Huatian Engineering & Technology Corporation	MCC HT
8	ACRE Coking and Refractory Engineering Consulting Corporation	MCCACRE
9	Zhongye Changtian International Engineering Co., Ltd.	CIE
10	Northern Engineering & Technology Corporation	MCC NETC
11	Shen Kan Engineering & Technology Corporation	MCC SKET
12	Wuhan Surveying-Geotechnical Research Institute Co., Ltd. of MCC MCC Financial Leasing Co., Ltd.	WSGRI
13	China First Metallurgical Group Co., Ltd.	CFMCC
14	China Second Metallurgy Group Co., Ltd.	MCC2
15	China Third Metallurgical Group Corporation Ltd.	TMCC
16	MCC5 Group Corp., Ltd.	MCC5
17	MCC Tiangong Group Corp., Ltd.	CTMCC
18	China MCC17 Group Co., Ltd.	MCC1
19	China Metallurgical Construction Engineering Group Co., Ltd.	СМСС
20	China 19th Metallurgical Corporation	MCC19
21	China MCC20 Group Corp., Ltd.	MCC20
22	China MCC22 Group Corp., Ltd.	MCC22
23	Shanghai Baoye Group Corp., Ltd.	SBC
24	China Huaye Group Co., Ltd.	NCMCC
25	MCC Baosteel Technology Services Co., Ltd.	MCC Baosteel

NO.	Name of subsidiaries	Short form
26	MCC Communication Construction Group Co., Ltd.	MCC-CC
27	MCC Road & Bridge Construction Co., Ltd.	MRBC
28	MCC (Guizhou) Construction Investment Development Co., Ltd.	/
29	Metallurgical Corporation of Central China Ltd.	Henan Branch
30	MCC Utility Tunnel Science and Technology Development Co., Ltd.	UTMC
31	MCC (Shanghai) Steel Structure Technology Corp, Ltd.	MCC-SSC
32	MCC Eco-Environmental Protection Group Co., Ltd.	/
33	MCC Southern China Construction Investment Co., Ltd.	MCC Southern China
34	MCC Urban Investment Holdings Company Ltd.	/
35	MCC (Hainan) Investment Development Co., Ltd.	MCC Hainan
36	MCC Great Wall Investment Co., Ltd.	/
37	MCC Real Estate Group Co., Ltd.	MCC Real Estat
38	MCC Tongsin Resources Ltd.	МССТ
39	MCC Australia Holding Pty Ltd.	МССН
40	MCC-JJJ Mining Development Co., Ltd.	MCC-JJJ
41	Ramu NiCo Management (MCC) Limited	Ramu Nico
42	MCC International Incorporation Ltd.	MCCI
43	MCC Overseas Ltd.	/
44	MCC Vietnam Engineering and Technology Company Limited	/
45	MCC International Economic and Trade Co., Ltd.	/
46	MCC Holdings (Hong Kong) Corp., Ltd.	MCC HK & Ma
47	MCC-SFRE Heavy Industry Equipment Co., Ltd.	/
48	MCC MINING (Western Australia) Pty. Ltd.	МСС
49	China No. 13 Metallurgical Construction Co., Ltd.	/

## Double **Materiality** Assessment of Topics

MCC has established a communication system to help stakeholders identify key topics that may impact the Company's long-term growth. This system ensures that potential issues are addressed in a timely manner and helps drive continuous improvement in sustainability.

### □ Determination of material topics

To better manage challenges from both internal and external changes, MCC has introduced a regular process for assessing material topics. The Company has updated its assessment methods according to the latest disclosure standards such as the Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial) and the Environmental. Social and Governance Reporting Guide by the Stock Exchange of Hong Kong Limited (HKEX). For the first time, we conducted a double materiality assessment, which considers both financial and non-financial impacts. During the reporting period, we followed the principles of double materiality assessment, and refined and updated the list and matrix of material topics. We also included external feedback, expert insights, and peer experiences in our analysis. By evaluating the ESG topics that affect the Company's finances, economy, environment, and society, we identified 24 material ESG topics and developed targeted responses for each.



MCC Double Materiality Assessment Process 2024



Clean energy development and utilization

Circular economy

Addressing climate change

Rural revitalization Supply chain management

small enterprises

contribution

#### Double Materiality Assessment of Topics

Community engagement and

Equal treatment of medium-sized and

### **D** Stakeholder engagement

MCC is committed to building strong relationships with stakeholders. We engage with them regularly through various channels to better understand their expectations and gather feedback on our ESG performance. Our stakeholders include, but are not limited to, shareholders and investors, clients and customers, employees, suppliers, government and regulatory institutions, partners, peer companies, communities, and the public.

Stakeholo	ders	Expectations and concerns	Engagement and feedback
	Shareholders and investors	<ul> <li>Return on investment</li> <li>Corporate risk management</li> <li>Protection of rights and interests</li> <li>Open and transparent information</li> </ul>	<ul> <li>Increasing profitability</li> <li>Improving risk internal control system</li> <li>Shareholders' meetings</li> <li>Roadshows and other activities to disclose information in a timely manner</li> </ul>
00 [1]	Clients and customers	<ul> <li>High-quality projects</li> <li>Outstanding project performance</li> <li>Superior customer service</li> <li>Rights and privacy protection</li> </ul>	<ul> <li>Strengthening project quality</li> <li>Stable production and on-time performance</li> <li>Improving customer service mechanism</li> </ul>
	Employees	<ul> <li>Protection of legal rights and interests</li> <li>Good career development platform</li> <li>Healthy and safe working environment</li> </ul>	<ul> <li>Regular workers' congress</li> <li>Establishing smooth internal communication channels</li> <li>Improving staff training system</li> <li>Providing occupational protection and physical check</li> </ul>
R	Suppliers	<ul> <li>Win-win cooperation</li> <li>Open and fair</li> <li>Keeping contracts and promises</li> <li>Promoting sustainable development of the industry chain</li> </ul>	<ul> <li>Multi-channel cooperation and research</li> <li>Daily communication and regular meetings</li> <li>Healthy and safe working environment</li> <li>Sustainable supplier management</li> <li>Improving open and fair procurement system and rules</li> </ul>
	Government and regulatory institutions	<ul> <li>Implementing government policies and regulatory rules</li> <li>Promoting employment</li> <li>Maintaining and increasing the value of state-owned assets</li> <li>Conducting business in a law- abiding manner</li> <li>Promote the "Dual Carbon" goal</li> </ul>	<ul> <li>Responding to the government advocacy actively</li> <li>Receiving inspection and conducting rectification</li> <li>Complying with law, strengthening compliance management and strengthening anti-corruption</li> <li>Energy saving and carbon reduction</li> </ul>
AULA	Partners	<ul> <li>Regular communication</li> <li>Long-term stable relationship</li> </ul>	<ul><li>High-level exchange of visits</li><li>Strategic cooperation</li></ul>
	Peer companies	<ul><li>Fair competition</li><li>Industry development</li></ul>	<ul> <li>Maintaining the industry business environment</li> <li>Participating in industry development forums</li> <li>Participation in industry standards setting</li> </ul>
$\triangleright$	Media	Open and transparent information     disclosures	<ul><li> Press releases and announcements</li><li> Media events</li></ul>
	Communities and the public	<ul> <li>Protecting the community environment</li> <li>Reducing pollutant emissions</li> <li>Addressing climate change</li> <li>Supporting community welfare</li> <li>Driving local economic development</li> </ul>	<ul> <li>Supporting rural revitalization</li> <li>Carrying out public welfare activities</li> <li>Participating in community project construction</li> <li>Strengthening environmental protection and setting environmental targets</li> <li>Strengthening localized management of overseas communities</li> </ul>

## ESG Governance Framework

MCC attaches great importance to sustainability and ESG management practices in business operations to ensure a structured approach to managing these efforts. We have established an ESG governance system, with the Board of Directors serving as the highest authority. Additionally, we have set up a Sustainability Committee and a Sustainability Department to oversee sustainability efforts through a top-down management approach. This framework covers strategy, objectives, organization, resources, performance, and culture, creating a comprehensive ESG management cycle that supports the continuous implementation of the Company's sustainability strategies and goals.



- Oversees the implementation and progress of the Company's sustainability strategy and plan.
- Monitors key sustainability issues relevant to the Company's business and explores related topics.
- Reviews and offers recommendations to the Board regarding the Company's ESG Report.
- Coordinates and standardizes the collection of ESG-related data to enhance the quality of information disclosure.
- Reviews ESG-related reports at least twice a year and engages in discussions with management.

In 2024, the Board's Sustainable Development Committee convened for three times, deliberating over five key reports including the 2023 MCC Social Responsibility And ESG (Environmental, Social And Governance) Report, 2023 MCC Annual Compliance Work Report, Report on the Company's Safety, Quality, and Environmental Protection Work in 2023, H1 2024 Report on Compliance Management, and H1 2024 Report on Safety, Quality, and Environmental Protection Work, and further enhanced the modern ESG governance system and improved ESG management mechanisms to effectively drive high-quality economic, social, and environmental development.



### □ United Nations Sustainable Development Goals (SDGs)

SDGs	Goals	MCC's Actions in 2024
1 ≌ ∰¥╋≢¶	Eliminate all forms of poverty worldwide.	<ul> <li>Continued to support rural revitalization through consumption assistance, industrial support, and construction projects after achieving comprehensive poverty alleviation, to prevent the risk of returning to poverty.</li> </ul>
2 Allo	End hunger, achieve food security, improve nutrition, and promote sustainable agriculture.	<ul> <li>Prioritized the safety of food production in engineering projects to foster sustainable agriculture.</li> </ul>
3 SOUNALIN MUTILIERS 	Ensure healthy lives and promote well- being for all at all ages.	• Established and improved an occupational health and safety management system, improved the ability to prevent and control occupational risks, and secured a safe and healthy workplace for employees.
4 course	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.	<ul> <li>Attached importance to staff training, and formulated diversified training plans and rich training activities</li> <li>Carried out education donation activities to help build schools in impoverished areas.</li> </ul>
5 course	Achieve gender equality and empower all women and girls.	<ul> <li>Protected the rights of female employees, upheld gender equality and equal pay, and provided special care for female employees.</li> </ul>
6 Accention	Ensure availability and sustainable management of water and sanitation for all.	<ul> <li>Improved the construction of basic facilities for water supply, actively provided assistance in the construction of educational and medical institutions, and donated medical equipment.</li> </ul>
7 алистика на	Ensure access to affordable, reliable, sustainable and modern energy for all.	<ul> <li>Strengthened the development and application of clean energy technologies such as hydrogen and photovoltaics.</li> </ul>
8 Incommentation Economic Longing	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.	<ul> <li>Safeguarded the rights and interests of employees and built a comprehensive remuneration system.</li> <li>Provided employees with career development pathways and training opportunities.</li> <li>Offered a wide range of employee benefits, and supported those in difficulty.</li> </ul>
9 ROUTE INVOLUTION REALIZATION OF THE OWNER REALIZATION OF THE OWNER RE	Build disaster-resilient infrastructures, promote inclusive and sustainable industrialization, and foster innovation.	<ul> <li>Focused on housing construction, transportation and municipal infrastructure construction, mid-to-high-end real estate and other infrastructure fields.</li> <li>Promoted scientific research and the development of innovation platforms.</li> </ul>





Strengthen the means of implementation and revitalize the global partnership for sustainable development.

accountable and inclusive institutions at all levels.

#### MCC's Actions in 2024

- Carried out volunteer assistance activities in regions involved in the Belt and Road Initiative to reduce inequalities by focusing on national foreign policies, resources and international production capacity cooperation initiatives.
- Leveraged business strengths to continuously develop affordable housing and green building projects, and undertook environmental protection projects such as ecological restoration and green construction.
- Advanced the development of green technologies, such as new energy metallurgical techniques and energy-efficient utilization.
- Implemented green procurement and promoted green and low-carbon concepts along the supply chain.
- Set carbon reduction targets, improved energy efficiency, promoted energy-saving and emission-reducing technologies, and adopted new environmentally friendly equipment.
- Undertook ecological restoration, wastewater treatment, and river basin treatment projects.
- Intensified soil pollution prevention and treatment and offered soil remediation consulting services.
- Strictly prohibit child and forced labor and have zero tolerance for corruption and fraud.
- Actively cooperated with governments, industry partners, and research institutions to achieve win-win outcomes.
- Propelled low-carbon transformation and green development in the industry.





Anchoring the goal of "One goal, Two best, Five strengths" to promote the re-transformation and upgrading of the Company

The year 2024 brought a series of risks and challenges, but it was also a year marked by resilience and determination for CMCC. Staying true to the principle of seeking progress while maintaining stability, MCC focused on driving high-quality development. The Company worked diligently to stabilize overall operations, explore new market opportunities, and strengthen project compliance. Efforts were also made to enhance management practices for greater efficiency, leverage scientific and technological innovation, and steadily advance strategic emerging industries. In facing risks, MCC remained proactive and committed to safeguarding its bottom line while actively planning for the Company's re-transformation and growth.

Anchoring the goal of "One goal, Two best, Five strengths", MCC set its sights on becoming a world-class enterprise with global competitiveness. The Company focuses on becoming the go-to provider for comprehensive metallurgical construction solutions and the most trusted partner for high-quality infrastructure projects both in China and abroad. MCC is committed to driving value through innovation, market competitiveness, resource management, and cultural influence.

Two

best

One goal

**Five strengths** 

must fulfill.

Build a "world-class enterprise". It is a major decision and deployment of the Party Central Committee, and also a requirement that we

**The best:** Provide "the best" metallurgical construction service by enhancing brand excellence and constructing a supreme competitive moat.

The most reliable: Continue to improve the system for fulfillment, marketing, technology and business of housing construction and infrastructure, and strive to become the "most reliable" general contractor.

Strength in value creativity: Enhance the sense of responsibility, mission and urgency, and accelerate the improvement of business quality and value creativity.

**Strength in market competitiveness:** Improve the marketing system, optimize the business structure and regional layout, strengthen the marketing concept of "quality markets, projects, and owners", and enhance the market competitiveness represented by the referendum ability.

Strength in innovation drive: transform scientific research achievements into technical advantages and program advantages, and play an effective role in reducing costs, increasing efficiency, and improving management.

Strength in resource allocation: Improving the ability of resource allocation is an important measure to perform well in project management and increase project profitability.

Strength in cultural soft power: Strengthen the cultural soft power of MCC Group, scientifically examine and interpret cultural concepts, and enhance the cohesion and alignment of cadres and employees.

Leveraging over 70 years of accumulated technical expertise and gualifications in the entire steel and metallurgical industry chain, MCC has hastened its pace of transformation and upgrading. The Company has consistently fortified and heightened its metallurgical services, enhanced its construction business, and increased its infrastructure services, amassing vast experience in housing construction, municipal infrastructure, rail transit, and urban renewal. Thus, MCC has progressively developed a diverse business structure of "one core, two subjects, and five characteristics" with metallurgical construction as its "core", housing construction and municipal infrastructure as its "subjects", and featuring mineral resources, engineering services, new materials, high-end equipment, and energy and environmental protection as its "characteristics".

## Maintaining stable operations, and consolidating the foundation for re-transformation and upgrading

In 2024, MCC navigated an exceptionally challenging external environment. Despite the pressures, teams at all levels stayed focused, pressed forward, and maintained steady operations with enhanced quality. Over the past year, MCC secured new contracts worth RMB 1,248.706 billion. At the same time, the Company's operating revenue reached RMB 552.025 billion, and total profit achieved the target of RMB 9.255 billion. Leading subsidiaries showed strong growth momentum, improved operational guality and efficiency, and delivered solid results despite external pressures.

### Optimizing market structure, and paving the way for retransformation and upgrading

In a challenging market landscape, MCC held its ground and navigated competition with determination, achieving steady progress in overall market performance. In 2024, the Company continued to optimize its regional layout, further consolidating and enhancing its metallurgical and industrial businesses. This effort led to steady growth in core operations, including significant advancements in green and low-carbon technologies within China's steel industry. Furthermore,

Linkage between MCC inkage betwee construction inkage betwe mining, and units and desig institutes and Minmetals Capital design and

## Topic -- Anchoring the goal of "One goal, Two best, Five strengths" to promote the re-transformation and upgrading of the Company



subsidiary enterprises strengthened collaboration, leveraged the advantages of integration, and expanded their market reach. The "Five-Linkage" strategy delivered strong results. Internationally, MCC built on last year's momentum, setting new benchmarks. The Company maintained over RMB 20 billion in annual revenue in Indonesia for three consecutive years and surpassed RMB 10 billion in Singapore, showcasing its growing global competitiveness and market influence.



As a leader in China's metallurgical construction sector, MCC remains dedicated to high-quality development and building a worldclass enterprise. The Company has made steady progress in improving contract execution and business management systems while strengthening its management team. In contract execution management, MCC conducted **14,424** project inspections across all levels, organized 1,255 training sessions to promote the Engineering Project Management Manual, and coordinated 10 headquarters departments for a comprehensive inspection under the "Big Compliance" framework. As a result, scores from key project inspections improved by 10.7% compared to the previous year. To develop its project management teams, MCC established high-quality learning platforms through forums, site visits, and training programs. These initiatives aimed to enhance the skills and expertise of its management personnel. As of 2024. MCC had 22,600 certified first-class constructors across 10 professional fields, including construction engineering, municipal engineering, electromechanical engineering, and highway engineering. This strong talent pool has provided crucial support for seamless project execution.

### Improving economic performance to strengthen transformation and upgrading

In 2024, MCC launched the "Three-Year Special Action for Cost Reduction, Efficiency Improvement, and Risk Mitigation" to enhance its economic performance. The Company promoted the "Three Focuses and One Prevention" strategy and revised the Assessment Plan for Controlling Account Receivable and Inventory, and Managing Arrears, and implemented multiple measures to meet its financial targets. Efforts to control costs and enhance efficiency included strict oversight of nonoperating expenditures and ensuring administrative expenses stayed within budget. These initiatives improved operational efficiency and strengthened overall economic performance.



## Advancing technological innovation to drive transformation and upgrading

In 2024, MCC prioritized technological innovation as a core driver of high-quality development. By continuously optimizing its innovation systems and strengthening digital management capabilities, the Company made significant strides in advancing its innovation goals.

Innovation Platforms: The Company focused on enhancing its R&D platforms, continued to refine institutional mechanisms, and was recognized by the SASAC as the "Original Technology" Source for Metallurgical Industry Pollution Control". Additionally, it obtained approvals for **6** provincial and ministerial-level technology innovation platforms.

Major Technological Breakthroughs: MCC undertook 8 national research projects and 45 provincial and ministeriallevel projects, initiated **25** major R&D projects, and completed the acceptance inspection of **9** significant R&D achievements.

Technology Commercialization: The Company earned **3** National Science and Technology Awards, including **1** Special Prize and **5** First Prizes in Metallurgical Science and Technology. MCC also obtained 2,724 newly authorized invention patents, increasing its total valid patents to over **55,000**. In addition, the Company secured approvals for **2** international standards and **10** national standards.

S&T talent development: The Company formulated the MCC Management Measures for Chief Experts and Chief Experts in Professional and Technical Fields of Metallurgical Science and Industry Corporation of China, to refine fullprocess management mechanisms for top experts and emphasized nurturing young scientific talent, with young professionals now accounting for over **40%** of participants in technological innovation projects.

Digital Management: The Company continued to improve its digital control platform, successfully integrating 29 subsidiaries into the "One Enterprise, One Screen" system, significantly enhancing data standardization and timeliness.



The year 2024 was a pivotal moment for advancing state-owned enterprise reform. MCC leveraged the Reform Deepening and Enhancement Action to guide key reforms and achieve milestones in a phased, high-standard, and highquality manner. Throughout the year, MCC made steady progress in developing strategic emerging industries, with a strong focus on research and development in pioneering and cutting-edge technologies. The Company achieved remarkable success in fostering model enterprises. During the reporting period, 9 of MCC's "Technology Reform Enterprises" and "Double Hundred Enterprises" delivered outstanding performances in SASAC's special evaluations. Additionally, **1** enterprise under the South Headquarters was listed in the eighth batch of national-level manufacturing champion enterprises. Moreover, 4 subsidiaries-CISDI, WISDRI, and CRIBC-were recognized in the sixth batch of Specialized, Refined, Unique, and Innovative (SRUI) "Little Giant" enterprises. As a result, MCC now boasts 6 national manufacturing champion enterprises and 10 SRUI "Little Giant" enterprises.

## Strengthening risk prevention to support transformation and upgrading

MCC upheld a bottom-line mindset, viewing risk prevention as essential to achieving high-quality development. The Company made solid progress in building a legal compliance system by implementing a subsidiary-specific "one-on-one" evaluation mechanism, reinforcing the primary responsibility of the "three lines of defense" for compliance, organizing compliance management system certification, and formulating the *Compliance Management Manual* for **20** business lines as well as the Compliance Guidelines for 3 key areas. Regarding workplace safety, MCC vigorously advanced the Three-Year Safety Risk Management Action, with a strong focus on eliminating major accident hazards and successfully addressing 260 critical safety risks. At the same time, the Company enhanced safety system capabilities, improving employees' safety awareness and emergency response skills through systematic safety management and comprehensive training programs.



In 2024, with a firm commitment to the goal of "One goal, Two best, Five strengths", MCC forged ahead with determination. By focusing on seven key areas-maintaining stable operations, optimizing market structure, enhancing project performance, improving economic performance, advancing technological innovation, unlocking reform potential, and strengthening risk prevention—the Company laid a solid foundation for achieving its annual targets and set the stage for a comprehensive transformation and full-scale upgrade in 2025.

## Topic -- Anchoring the goal of "One goal, Two best, Five strengths" to promote the re-transformation and upgrading of the Company

Selected as "Double-Hundred Enterprises" by SASAC

### **4** subsidiaries

CISDI, MCC5, MCC17, MCC22

#### Selected as "Technology Reform Enterprises" by SASAC

### **5** subsidiaries

China ENFI, CERI, WISDRI, MCC ACRE, WSGRI



F

MCC's project in Chengdu—Dong'an Lake Sports Park, venue of the World University Games opening ceremony

## Green Leadership and Ecological Co-Development

MCC actively responds to the national call for ecological civilization construction and thoroughly implements Xi Jinping Thought on Ecological Civilization. The Company integrates environmental protection and green development across all aspects of its operations, promoting sustainable and low-carbon economic and social development. Leveraging its growing strengths in energy conservation and environmental protection, MCC has embarked on a dynamic journey of green and highquality development.

## ENVIRONMENT

## **Environmental Protection**

As a central state-owned enterprise, MCC takes its environmental responsibilities seriously. The Company continues to enhance its environmental management systems, focusing on building a resource-efficient and eco-friendly company. The Company places ecological and environmental protection at the forefront of its development strategy and operational activities.

### **Environmental management**

MCC strictly complies with relevant laws and regulations, including the Energy Conservation Law of the People's Republic of China and the Environmental Protection Law of the People's Republic of China. In 2024, the Company compiled the MCC Implementation Rules for Safety and Environmental Protection Assessment, revised internal management policies such as the Energy Conservation and Ecological Environmental Protection Management Measures of MCC Group and MCC, the Energy Conservation and Ecological Environmental Protection Reporting Implementation Rules of MCC Group and MCC, the Emergency Response Plan for Environmental Incidents of MCC Group and MCC, and the Safety and Environmental Incident Accountability and Reward Implementation Measures of MCC Group and MCC. These revisions further clarified and refined environmental management requirements. As of the end of the reporting period, MCC had already obtained ISO 14001 environmental management system certification.

As of the end of the reporting period

MCC had already obtained

ISO 14001 environmental management system certification

Luoyang Silicon Corporation Ltd. listed as a "Green Factory" by the Henan Provincial Department of Industry and Information Technology

### **Environmental management system**

MCC has built a three-tier environmental management system with a clear division of power and responsibility. At the top, a leading group for ecological and environmental protection and peak-carbon neutrality serves as the highest decision-making body. This group is responsible for reviewing and making key decisions regarding environmental management. The Quality Environmental Protection Department operates under the guidance of this leading group, managing the daily coordination, supervision, and implementation of environmental protection efforts. Meanwhile, subsidiaries and affiliated enterprises at all levels bear the primary responsibility for energy conservation and environmental protection, with the Secretary of the Party Committee, Chairman, and General Manager of each subsidiary designated as the first persons responsible for environmental protection.

To ensure strict adherence to internal and external environmental regulations, MCC has established the energy conservation and ecological environmental protection responsibility commitment and assessment checklist. In 2024, the Company signed environmental responsibility agreements with 37 subsidiaries. Additionally, the Company linked the performance of senior management to environmental protection outcomes, encouraging proactive engagement and ensuring effective progress in environmental management.

### In 2024

Signed a letter of responsibility for energy conservation and ecological environmental protection with

**37**<sub>subsidiaries</sub>



#### Environmental management targets

As of 2025 Exploring the use of clean energy and reducing coal consumption intensity

As of 2025 Increasing the efficiency of water and gradually reducing the density of freshwater consumption

### **Environmental risk management**

MCC has established a comprehensive environmental risk management mechanism. The Company conducts regular assessments to identify and control ecological risks, using risk lists and strict source control measures to minimize potential environmental impacts. In 2024, MCC further enhanced its risk prevention efforts by developing and issuing an environmental risk grading and control ledger for its core business operations. This initiative led to the identification of

	Identify environmental risks
In 2024	<b>1,927</b> <sub>items</sub>

MCC carried out an emergency drill for hazardous chemical leakage accidents

In June 2024, MCC successfully carried out an emergency drill for hazardous chemical leakage accidents in a chlorosilane storage tank area. By actively linking the fire protection of the park, participants carried out emergency rescue simulations such as emergency command, process disposal, fire alert, wounded treatment, timely and effectively sealing the leakage part to eliminate the danger, which met the expectations of this drill. This drill significantly enhanced MCC's capabilities in environmental risk management and emergency response, providing robust support for mitigating the ecological impact of unforeseen environmental incidents.



Emergency drill for hazardous chemical leakage

As of 2025 Strengthening manufacturing processes and striving to reduce the density of non-hazardous and hazardous waste

1,927 environmental risks and the implementation of 6,280 targeted environmental protection measures. Additionally. MCC continued to refined its environmental emergency management, ensuring comprehensive prevention of environmental risk. In 2024, the Company actively conducted emergency drills for environmental pollution incidents, strengthening its ability to handle emergencies effectively.

Formulate targeted environmental protection control measures 6,280<sub>items</sub>



Emergency drill site

### **Green operations**

Driven by a commitment to sustainability, MCC actively pursues the "Dual-Carbon" goal, incorporating green concepts into its corporate development strategy. The Company promotes industrial restructuring and upgrades to achieve energy conservation, emission reduction, and high-quality green development. In 2024, focused on efficient resource

### **Energy use**

MCC is committed to efficient energy development and utilization. The Company has established a robust energy management system and actively promotes sustainable development through technological innovation, energy conservation, and carbon reduction. The Company strictly follows the Energy Conservation Law of the People's Republic of *China*, strengthens its carbon reduction capabilities, promotes energy conservation and carbon reduction projects, improves energy management in key energy sectors, and promotes energy conservation and emission reduction measures.

utilization by optimizing production processes and reducing resource consumption across its operations. The Company also strictly implemented its emission management system, ensuring compliance with national pollutant emission standards by treating pollutants generated during production and business activities.

In 2024, MCC focused on improving the efficiency of fossil energy use while actively promoting clean and renewable energy applications. The Company supported the transition to a cleaner, low-carbon energy structure by benchmarking energy efficiency, conducting energy-saving diagnostics, and encouraging subsidiaries to undertake energy audits. For enterprises listed as key local energy consumers, we proactively explored market-oriented approaches to enhance energy conservation and emission reduction. These initiatives included contractual energy management, emission rights trading, carbon trading, and leveraging green financial tools to support sustainable energy practices.

#### Promoting green and low-carbon transformation through furnace upgrading and waste heat recovery

Through a furnace upgrading project, MCC comprehensively optimized existing heating furnaces and heat treatment furnaces. Advanced technologies such as waste heat recovery, energy-saving burners, and insulating coatings significantly improved natural gas combustion and reduced heat loss. At the same time, we improved industrial furnace combustion processes and updated insulation materials, which further enhanced energy efficiency. This project is planned to be implemented in phases from 2023 to 2030 with a total investment of RMB 36 million. When fully operational, the project is expected to reduce CO<sub>2</sub> emissions by 15,000 tonnes per year.



Furnace upgrading project

MCC carried out an energy-saving and renovation project for the dust removal system at the Baoshan steel-making plant. Through network evaluation, dynamic energy consumption analysis, and equipment selection, the project employed measures such as adding frequency converters, upgrading fans, and optimizing pipelines, resulting in a significant improvement in energy efficiency. After the renovation, the dust removal system achieved an annual electricity saving rate of 18%, with actual annual savings totaling 13,391,800 kWh.

MCC is advancing intelligent construction by developing dynamic energy consumption monitoring platforms. These efforts aim to support low-carbon transformation through digitalization, improve energy efficiency, and implement measures for energy saving, carbon reduction, and efficiency enhancement.

At MCC's Daxing Experimental Base Intelligent Park, office buildings were renovated to become greener and more energy-efficient. The project included upgrading the energy consumption system, environmental monitoring system, fresh air system, intelligent lighting, and security systems. By introducing intelligent automatic monitoring and control technologies, the system monitors indoor air quality and connects directly with the fresh air system. It also provides visualized data on electricity and water consumption, optimizes energy management, and automatically adjusts lighting based on time, occupancy, and natural light to enhance comfort and energy efficiency. As a result of these upgrades, the buildings significantly reduced energy consumption and operational costs, achieving notable energysaving and emission-reduction results.



Daxing experimental base smart park management platform

#### The energy-saving retrofit of the dust removal system effectively reduced electricity consumption



The EMC energy-saving renovation for the dust removal system at the Baoshan steel-making plant

#### Renovation to create intelligent office buildings, digital solutions for low-carbon transformation

Green Leadership and **Environment** Ecological Co-Developmen

### Water resource management

MCC strictly adheres to internal management systems such as the Energy Conservation and Ecological Environmental Protection Management Measures of MCC Group and MCC. The Company has established a water resource utilization and management model in line with the Company's industrial

**Pollutant management** 

MCC strictly complies with laws and regulations such as the *Air* Pollution Prevention and Control Law of the People's Republic of China. the Water Pollution Prevention and Control Law of the People's Republic of China, the Soil Pollution Prevention and Control Law of the People's Republic of China, and the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes. The

#### MCC's key pollutant management measures

scale, advancing the construction of a water-efficient enterprise. In 2024, the Company actively advanced water recycling solutions, significantly improving water reuse rates and enhancing overall water resource efficiency across its operations.

Company adheres to the national pollutant discharge permit system, ensuring that pollution control facilities operate and are maintained in line with regulatory requirements. We regularly submit executive reports to the relevant authorities in accordance with the pollutant discharge permit system, integrating pollutant management into all stages of the Company's operations.

Prevention and control of dust pollution	<ul> <li>Formulates detailed prevention and control plans for construction dust pollution, display measures, responsible personnel, and supervising management department at construction sites.</li> <li>Strictly implements the "Six 100%" requirement, including construction sites 100% enclosed, Material stacking 100% covered, vehicles leaving the sites 100% washed, construction site roads 100% hardened, demolitions 100% wet works, dump trucks during transportation 100% sealed.</li> </ul>
<u>کی ان کی ا</u>	• For operations that generate volatile organic compound (VOC) emissions, such as painting and spraying, MCC establishes enclosed work areas, installs exhaust gas treatment facilities, and conducts regular monitoring. Certified test reports are provided to ensure compliance.
I Prevention and control of noise pollution	<ul> <li>Complies with construction time restrictions and obtains necessary permits, making public announcements as required by local government regulations for nighttime work.</li> <li>Implements noise-reducing measures in noise-sensitive areas such as residential neighborhoods, hospitals, schools, and office buildings.</li> </ul>
Prevention and control of wastewater pollution	<ul> <li>Establishes closed drainage systems at construction sites, constructs drainage ditches around construction site roads and material stacking sites, and provides urban drainage facilities.</li> <li>Installs oil separation tanks and septic tanks in kitchens and toilets, ensuring regular maintenance and cleaning.</li> </ul>
Prevention and control of solid waste pollution	<ul> <li>Stores and collects toxic materials and oils with waterproof barriers to handle leaks.</li> <li>Collects hazardous waste (e.g., paint and coatings), and transfers it to certified waste disposal providers for proper treatment.</li> <li>Requires construction units to develop and file waste management plans, ensuring timely removal and disposal of solid waste in compliance with regulations.</li> </ul>

### **Environmental protection culture**

MCC vigorously promotes green office practices, and systematically carries out water and energy conservation initiatives to reduce resource consumption. The Company enhances electricity management, adopts energy-efficient and eco-friendly equipment, encourages paperless office practices, and standardizes hazardous waste disposal measures, thereby improving the overall level of green office operations.

To strengthen environmental awareness, MCC regularly conducts training programs focused on energy conservation, ecological protection, and environmental management

### MCC organized specialized training on energy conservation and environmental protection

In May 2024, MCC organized specialized training on energy conservation and environmental protection through a combination of on-site sessions and live streaming. The training focused on key topics such as studying Xi Jinping's Thought on Ecological Civilization, implementing environmental protection responsibilities, building risk management mechanisms, and pollution prevention efforts. It systematically enhanced employees' environmental awareness and professional capabilities. With over 3,000 employees participating, the training effectively contributed to improving the company's environmental management system and promoting a culture of green and sustainable development.





for engineering projects. These sessions aim to improve employees' understanding and skills in managing environmental responsibilities. Upholding a commitment to cost-effective operations and efficiency improvement, MCC has fostered a strong green corporate culture. In 2024, MCC subsidiaries across China organized environmental experience days and volunteer activities during National Energy Conservation Week, National Low-Carbon Day, and National Environment Day. These events promoted the core values of ecological conservation and green development, raising awareness about ecological civilization and sustainability while fostering a strong culture of green development.

Specialized training on energy conservation and environmental protection

Aligned with the national carbon peak and carbon neutrality goals, MCC actively promotes energy conservation and carbon reduction strategies. The Company continues to optimize its industrial layout while enhancing technological innovation and leadership in carbon emission management, low-carbon technologies, and environmental governance. These efforts pave the way for sustainable, high-quality, and low-carbon development.

### □→ Management structure

To actively respond to the nation's "dual carbon" goals, MCC has established a dedicated leadership team for carbon peaking and carbon neutrality. The Company has implemented a three-tiered management system to strengthen coordination and leadership of its "dual carbon" initiatives. In 2024, the Company formulated a carbon peaking action plan. and conducted research on green and low-carbon development within the metallurgical industry.



MCC's Climate Change Governance Structure

## **Response strategies**

MCC is fully committed to implementing the carbon peaking action plan, establishing a phased strategic roadmap and clear implementation pathway through the "Top Ten Carbon Peak Actions". The Company has integrated the "dual carbon" goals into every aspect of its operations, continuously enhancing its capacity to adapt to and manage climate change.

#### Short-term phase (2023-2025)

Focus on controlling the significant increase in total carbon emissions, enhancing carbon reduction capabilities, and electrification of energy use.

### 

MCC proactively addresses climate change risks by regularly identifying and assessing climate-related threats. The Company strengthens monitoring and maintenance of key areas and equipment, promptly issues early warnings for severe weather conditions, and conducts regular inspections for flood control, flood prevention, and typhoon preparedness. These measures ensures the safety and continuity of production activities under various climate conditions.

MCC strengthens typhoon defense measures

MCC placed great emphasis on climate risk management and implemented comprehensive typhoon defense measures. In terms of emergency supplies, all projects completed inspections and classification storage of sandbags, water pumps, waterproof tarps, and other materials ten days before receiving a typhoon warning, ensuring that supplies could reach the site within two hours. For personnel training, practical drills simulated power outages and equipment repairs, strengthening workers' ability to identify escape routes and operate drainage equipment. In facility protection, a threetier safeguard system of reinforcement, height reduction, and locking was applied to key structures such as temporary housing and tower cranes. Flood barriers were installed around deep excavations, and storage areas were fully covered with waterproof tarps secured with weights. Regarding warning responses, real-time updates were disseminated through broadcasts and WeChat groups, and 24-hour patrols began 48 hours before the typhoon's arrival, with personnel in low-lying areas relocated within 12 hours. In emergency drills, full-process evacuation exercises were conducted to optimize evacuation routes. During the 2024 typhoon warning in Xiamen, MCC successfully achieved zero casualties and no major losses, effectively safeguarding personnel and project progress through a comprehensive "human, material, and technical defense system.

### □ Performance indicators and targets

MCC is fully committed to advancing national carbon peak and carbon neutrality goals. The Company actively promotes lowcarbon projects and strives to minimize and offset carbon emissions generated during production and operations, steadily advancing towards its "dual carbon" targets. In 2024, the Company set specific carbon reduction goals, contributing to green and low-carbon development.



emission density

#### Mid-term phase (2025-2030)

Focus on implementing a dual-control approach for total carbon emissions and intensity, developing green, low-carbon production methods, and improving resource conservation and efficiency.



As of 2025, actively formulating carbon reduction plans to reduce GHG

MCC continues to drive the low-carbon transformation of the industry, aiming to be a key contributor to global green development. Leveraging its comprehensive industry chain advantages, the Company focuses on advancing green upgrades in steel metallurgy, promoting the development and application of renewable clean energy, enhancing energy efficiency, and integrating renewable energy solutions into building designs. At the same time, MCC strengthens its research and development capabilities to support innovation in the environmental protection industry. The Company places high importance on ecological and environmental protection, striving to achieve harmonious coexistence between humanity and nature.

### □ Advancing green metallurgy

MCC is dedicated to upgrading metallurgical technologies, with a strong focus on achieving a low-carbon and green transformation within the steel industry. The Company actively develops and promotes energy-efficient and carbon-reducing technologies, supporting the structural optimization of the steel industry and providing comprehensive solutions for the green and low-carbon development of metallurgy.

MCC broke through carbon reduction challenges, adding new achievements to hydrogen carbon blast furnace technology

In July 2024, MCC signed a contract with Zhongtian Steel Group for three 3R hydrogencarbon blast furnace EPC projects, further promoting the market application of the 3R hydrogen-carbon blast furnace technology independently developed by the Company. This technology enhanced gas utilization efficiency by recycling reductive gases in the coal gas, reduced solid carbon consumption in blast furnaces, and delivered significant economic, social, and ecological benefits.



3R hydrogen carbon blast furnace EPC project

#### MCC creating new productive forces in China's sustainable coking industry



Guizhou Meijin project

In June 2024, MCC's domestic largest top-loading coke oven, the No. 2 coke oven of the Guizhou Meijin project phase I, successfully commenced production, marking the successful commissioning of two toploading coke ovens at the largest scale in China within one month. As the largest top-loading coke oven in China, the project utilized internationally advanced clean production technologies, producing 3.8 million tonnes of high-quality metallurgical coke and 40 million standard cubic meters of highpurity hydrogen annually, reducing CO<sub>2</sub> emissions by nearly 50,000 tonnes each year. This project injected strong momentum into the development of new productive forces in green coking and drove the new industrialization of the metallurgical industry.

### **Developing clean energy**

Expanding new energy businesses is essential for achieving a green energy transition. MCC remains committed to expanding clean energy applications, supporting industries in increasing the use of green energy, promoting the development and deployment of renewable energy technologies, driving the green and low-carbon transformation of industries, and contributing to the Beautiful China initiative.

### Tackling hydrogen storage challenges, MCC led the world in underground hydrogen storage system

In November 2024, MCC developed the "50,000Nm<sup>3</sup> horizontal tunnel underground hydrogen storage system", which was certified as the first major technical equipment in the energy sector in China. This system overcame several key technical challenges in underground hydrogen storage, significantly improved hydrogen storage and transportation efficiency, reduced hydrogen storage costs, providing critical technological support for large-scale clean energy applications. In December 2024, the underground hydrogen storage system came into operation, marking a global breakthrough in horizontal tunnel underground hydrogen storage, with the largest storage 50.000Nm<sup>3</sup> horizontal tunnel underground hydrogen capacity in the world. Once operational, this project will drive storage system the widespread adoption of hydrogen energy across industries such as manufacturing, transportation, and energy, contributing to China's green-oriented transition of energy and the achievement of the "dual carbon" goals.

### Green building development

MCC promotes green building technology innovation through systematic strategies. The Company has developed a full-cycle, low-carbon building system that focuses on three key aspects: planning and design, material application, and energy structure. In the planning and design phase, MCC leverages digital technology to optimize energy efficiency simulations, creating building designs that naturally harmonize with the environment. At the material application end, the Company prioritizes the use of high-performance, energy-efficient materials. This includes innovations such as phase-change energy storage walls, and photovoltaic curtain walls, significantly improving energy efficiency and reducing operational costs. In terms of energy structure, MCC integrates geothermal heat pumps, photovoltaic power generation, and smart microgrid technology to effectively increase the proportion of renewable energy in buildings. In 2024, the Company's "Fangyuan Habitat" modern industrial park project won third place in the "Green and Low-Carbon Architectural Innovation Design Competition for Hot Summer and Cold Winter Regions". This project set a replicable technical model for ultra-low-energy buildings in areas facing extreme climate conditions. It also marked a significant milestone, demonstrating that China's industrial park buildings are advancing toward global leadership in carbon-neutral design and construction.



#### MCC used green building technology to help build an intelligent industrial park

In July 2024, the Tuanjiehu Big Data Intelligent Industrial Park project constructed by MCC successfully became a demonstration project of the "Research and Demonstration of Key Technologies for Carbon Reduction in Urban Areas and Blocks", a national key R&D program of the "14th Five-Year Plan". The project integrated multiple green and low-carbon technologies, including natural lighting, flexible energy storage, polyurethane glass curtain walls, vertical greening, and kitchen waste recycling. These innovations aimed to maximize the use of renewable energy while incorporating smart management and digital technologies to enhance efficiency. The Company built a full life-cycle management platform, promoting the green and intelligent upgrade of urban construction and operations. As a national key R&D program demonstration project, this initiative provided a replicable technological pathway for green building development, showcasing how data-driven solutions can support intelligent upgrades in urban construction, and offering an integrated model for sustainable urban development and operations.



Tuanjiehu Big Data Intelligent Industrial Park Project

### **Empowering the environmental protection industry**

Leveraging its strong research capabilities in industrial environmental protection and pollution control, MCC fully utilizes its technical and engineering practice advantages. The Company is deeply involved in key areas of ecological and environmental protection, including wastewater treatment, water quality safety, solid waste disposal, and waste gas emissions. Through continuous technological innovation and customized service solutions, MCC drives the development of the environmental protection industry, making valuable contributions to regional ecological and environmental protection.

#### MCC built a benchmark for wastewater treatment

MCC's Liangxiang Wastewater Treatment Plant BOT (Build-Operate-Transfer) Project in Fangshan District, Beijing, is a municipal wastewater treatment project that implements the highest discharge standards in China. The project adopts a "six-in-one" model, integrating wastewater treatment, water source heat pumps, photovoltaic power generation, smart water management, sludge disposal, and reclaimed water utilization. As one of the country's pioneering comprehensive environmental protection and new energy demonstration projects, it is designed to treat 100,000 tonnes of wastewater daily and produce 35,000 tonnes of reclaimed water per day. This project plays a crucial role in driving the development of the environmental protection industry and enhancing wastewater treatment capabilities across the industry.



BOT project of Liangxiang Wastewater Treatment Plant in Fangshan District, Beijing

#### By employing innovative emission reduction technology, MCC enabled ultra-low emission retrofit for Guangxi Shenglong's hot blast furnace flue gas



Ultra-low emission retrofit project for Guangxi Shenglong's hot blast furnace flue gas

MCC successfully completed an ultra-low emission retrofit for the flue gas treatment system at Guangxi Shenglong's hot blast furnace. The project employed advanced activated coke cascade recycling technology, enabling deep purification of pollutants such as particulate matter and sulfur dioxide, and significantly enhanced flue gas treatment efficiency. Despite challenges such as limited site space and overlapping construction activities, MCC completed the project on schedule. Upon commissioning, the system achieved stable operation, effectively reducing pollutant emissions and improving the quality of the surrounding environment.

#### Environmental innovation technology driving the development of "Zero-Waste City"

In December 2024, the Ningbo Haijing fly ash mediumlow temperature pyrolysis project, contracted by MCC, successfully passed the 168-hour performance acceptance test. The project utilized MCC's proprietary medium-low temperature pyrolysis equipment for fly ash treatment. The treated fly ash can be reused in the chemical and construction industries, promoting resource utilization and eliminating the need for landfill disposal. This initiative contributed to the development of "Zero-Waste City".



Ningbo Haijing fly ash medium-low temperature pyrolysis **EPC** project



### **Ecological restoration initiatives**

Guided by the principles of ecological priority and green development, MCC remains dedicated to fostering the sustainable development of regional ecosystems. The Company actively participates in ecological management projects, integrating ecological restoration concepts across its entire industrial chain to help build resilient green ecological barriers. In 2024, MCC refined its soil pollution prevention processes, advanced ecological restoration technologies, and strengthened research and innovation efforts in soil remediation. Through these efforts, MCC contributed its expertise to improving regional environmental quality, fostering the healthy circulation of ecosystems, and supporting national soil resource conservation initiatives.

### MCC facilitated the green revitalization of the eastern mining area in Sanhe City

In the fifth phase of the geological environmental management project for the eastern mining area of Sanhe, MCC implemented a series of ecological restoration measures, including disaster prevention and mitigation, terrain leveling, and soil covering with vegetation, to rehabilitate the mining ecosystem. As a result, the entire eastern mining area was successfully revegetated, covering a total rehabilitation area of 6.95 km<sup>2</sup> and creating over 5,500 acres of newly available land resources. The ecological environment of the reclaimed mining area has been significantly improved, creating a "lucid waters and lush mountains" ecological landmark for Sanhe.



## green development

In December 2024, the Maoxi Sauce Jiuba Project in Guilin, constructed by MCC, actively adopted ecological protection measures to ensure sustainable development. The project used ecological bags, spray greening, and grass planting techniques for slope protection, effectively preventing soil erosion and reducing landslide risks. This approach successfully integrated project construction with ecological protection, promoting mutual benefits and fostering a harmonious balance between development and environmental protection.





<sup>1</sup> BOT,Build Operate Transfer mode.



Mine geological environment restoration in Sanhe Eastern Mining Area



Gulin Maoxi Sauce Wine Nine Dam Project



## Technological Innovation and Quality **Co-Building**

MCC actively supports the national strategy of accelerating progress toward greater self-reliance and strength in science and technology. The Company continues to refine its business structure, placing technological innovation at the core of its growth strategy. MCC has developed a comprehensive business management system, focused on scientific and technological talent pool, engaged in community development, and contributed to high-quality growth.

Society

## Leading Technological Innovation

At MCC, technological innovation is seen as the key driver of high-quality development. We have established a comprehensive innovation system, ensuring efficient allocation of technological resources while developing platforms to support cutting-edge research. To foster innovation, MCC has introduced incentive mechanisms that encourage research breakthroughs, standardized intellectual property protection, and enhanced digital management capabilities. These efforts aim to position MCC as a leader in technological innovation.

### □ Technological Innovation Platforms

Under the principle of "complementary advantages, resource sharing, and joint development", MCC has established multiple R&D platforms to drive technological progress. MCC has established the *Implementation Guidelines for the Incentive and Assurance of National Key Laboratories of MCC*. These guidelines help integrate resources from government, industry, academia, research institutions, and end-users, fostering deeper collaboration across production, education, and research. As of 2024, MCC has established 28 national-level science and technology R&D platforms. These initiatives have significantly strengthened MCC's independent innovation capabilities, supporting technological advancements and promoting industrial upgrades.

In 2024, MCC consolidated its technological expertise by developing a comprehensive technological spectrum covering six major business areas: metallurgical construction, municipal infrastructure, mineral resources, energy and environmental protection, new materials, and inspection and testing. This framework has laid a solid foundation for the Company's continued transformation and future upgrades.

MCC won the second prize of the State Technological Invention Award for the "Key Technologies and Applications for the Preparation of Ultra-Stable Materials from Large-Scale Fine-Grained Solid Wastes with Low Calcium Content"

In 2024, in response to the urgent demand for largescale and safe utilization of fine-grained solid wastes, MCC pioneered a novel low-calcium activation method for the safe treatment of solid wastes. This breakthrough technology has been widely applied in mining, transportation, and water conservancy industries across 20 provinces in China and BRI countries, representing a major breakthrough in large-scale and safe utilization of fine solid wastes and contributing significantly to China's green, low-carbon, and circular economy.



Certificate of National Technologica Invention Award granted to MCC

### **Technological Incentives and Safeguards**

MCC places technological innovation at the core of its development strategy. The Company revised the *Management Measures for Chief Experts of MCC* to enhance the innovation assessment framework, protect research achievements, and promote the commercialization of scientific and technological advancements. We also take a strategic approach to building our scientific research talent pool, ensuring that investment and project direction align with long-term research goals. This helps ensure the steady progress of our scientific efforts.



We continue to develop a multi-tiered, diverse, and researchintensive international steel technology team. In 2024, further refined its technological innovation evaluation system by introducing stricter assessment and incentive mechanisms. These measures aim to spark creativity and encourage innovation within our research teams. During the reporting period, MCC's strong research capabilities and continuous drive for innovation led to significant breakthroughs in key areas, including metallurgical engineering technology, new material R&D, energy conservation, and environmental protection. These achievements have played an important role in advancing the overall technical level of China's metallurgical industry.

### Technological awards won by MCC National Science National and Technology Technology Progress Awards Invention Award 2 Items 1 Item Metallurgical Science China Engineering and Technology Awards of China Iron and Steel Industry Association 18 Items 21 Items

### **D** Major scientific research achievements

MCC plays a pivotal role in advancing the modernization of industrial systems and supporting the development of new economic models. Guided by ongoing reforms, the Company has intensified its focus on R&D, tackling challenges in foundational, urgent, cutting-edge, and disruptive technologies. These efforts aim to overcome critical technical barriers while contributing to China's modernization and high-quality economic growth.

In 2024, MCC made significant strides in advancing the national-level "181 Plan" for metallurgical construction. Key achievements included, successfully developing an integrated hydrogen energy "production-storage-utilization" industrial chain solution; achieving breakthroughs in advanced low-carbon smelting technologies, including hydrogen-rich sintering, hydrogen-rich blast furnaces, and hydrogen-based direct reduction smelting; and, promoting the R&D of digital and intelligent technologies throughout the entire production process, supporting the green and intelligent transformation of the steel industry. In 2024, a total of 10 major R&D projects under the "181 Plan" were initiated.

Robust Operation and Shared Responsibility



### In 2024

The initiation of major R&D projects under the "181 Plan" reached

### 10 Items



#### MCC's "181 Plan" Major R&D Project — Innovation in Intelligent Power Consumption Analysis Technology for Steel Enterprises Based on 5G

In 2024, MCC led the achievement of the "Research and Application of Key Technologies for Intelligent Power Consumption Analysis in Steel Enterprises Based on 5G". The project established a power data collection and intelligent analysis platform utilizing 5G and other wireless communication technologies. This platform not only enables fundamental electricity consumption analysis but also automatically generates power quality analysis reports, providing comprehensive power data support for steel enterprises. Additionally, the project developed a standardized electricity consumption model tailored for steel enterprises, facilitating more precise and efficient power management. During the reporting period, this technology had applied for 6 invention patents, registered 9 software copyrights, and published 4 papers.



Enterprise power grid monitoring system

MCC has achieved significant progress and breakthroughs in advancing key R&D projects aligned with China's "Dual Carbon" goals and the industry's push towards digitalization and smart transformation. In 2024, the Company was approved to undertake 8 projects under the national key R&D programs and projects under the National Natural Science Foundation of China.

#### National key R&D program topic : "Low-Carbon Technology Verification and Evaluation for Structural Steel and Carbon Labeling System"

This topic focuses on typical structural steel products used in construction, conducting research on low-carbon technology systems, carbon neutrality technology roadmaps, comprehensive evaluation and verification systems, and a life-cycle carbon labeling evaluation system. The aim is to support the low-carbon design and development of structural steel products and the creation of a low-carbon and green industry chain.



Kickoff meeting for the project topic: "Low-Carbon Technology Verification and Evaluation for Structural Steel and Carbon Labeling System"

### □ Intellectual property protection

MCC is committed to advancing China's strategy of becoming an intellectual property powerhouse while promoting the development of new quality productivity. We strictly comply with the Patent Law of the People's Republic of China and other relevant laws and regulations. We have revised internal policies such as the MCC Intellectual Property Risk Warning Management Measures to enhance patent and copyright protection mechanisms and ensure the effective safeguarding of intellectual property rights.

Recognizing the importance of risk management and institutional awareness, MCC prioritizes intellectual property training to deepen employees' understanding and awareness of IP protection. In 2024, we conducted 93 training sessions, reaching 9,128 participants across the Company.

#### MCC's patent overview in 2024



Additionally, MCC actively monitors industry trends and plays a key role in shaping national and industry standards, providing strong support for the Company's strategic planning and development. In 2024, the national standard Water Footprint Evaluation Requirements for the Iron and Steel Industry, co-authored by MCC, was officially released. This standard contributes to the green development of the iron and steel sector while enhancing the international competitiveness of China's steel industry. MCC also collaborated with international experts to develop the Steel Structures – Execution of Structural Steelwork series, an international standard for steel structure construction. These standards provide unified technical specifications for the global steel construction industry, reinforcing MCC's leadership in both standardization.

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## Quality and Safety Assurance

Guided by the core principle of "quality first, safety foremost", MCC is committed to advancing standardized, refined, and digitalized project management. We follow a strategic approach rooted in "overall deployment, problem-oriented solution, coordinated promotion, and phased implementation". In addition, MCC maintains strict quality control measures, a comprehensive safety management system, and robust supply chain oversight to ensure the consistent excellence and safety of its products and services.

### Quality Management

MCC regards project quality as the cornerstone of its business operations. We ensure that every step of the construction process meets the highest standards by continuously enhancing our quality management system, strengthening supervision and inspections, and enforcing strict safety controls.

### **Quality management system**

The Company prioritizes quality in every project and strictly complies with relevant laws and regulations, including the *Product Quality Law*, the *Construction Law of the People's Republic of China, the Regulations on the Quality Management of Construction Projects*, and other relevant laws and regulations. We have also developed internal systems such as the MCC Group and *MCC Quality Management Measures* and the *MCC Implementation Rules for Quality Management of Construction Enterprises*. These measures help build an integrated quality management system that supports continuous improvement. During the reporting period, the Company continued to strengthen the overall quality control level of the whole process in accordance with the requirements of the Quality Management System Standard (GB/T 19001).

### **Quality supervision and inspection**

With engineering quality as the starting point, MCC organized specialized quality inspections across various project categories, including municipal, transportation, and civil building engineering, aligning with its "one core, two main bodies, and five distinctive features" business structure. Key inspection measures included, conducting comprehensive inspections of subsidiaries, targeted spot checks in assigned regions, and company-level supervision. The Company focused on checking the implementation of the *Engineering Project Management Manual* and related guidelines, identifying key risk factors in quality, safety, and critical functional use. Throughout the year, MCC organized inspections for 1,589 projects across 26 subsidiaries, significantly enhancing the overall quality and safety standards of its engineering projects.

#### MCC inspection team conducted project inspections on a regular basis

In 2024, MCC organized inspections of projects belonging to the largescale fulfillment system, actively implemented the requirements of the MCC Group *Three-Year Action Plan for Enhancing the Fundamental Management of Production Fulfillment System* and promoted the comprehensive implementation of the *Project Management Manual*. A joint inspection team consisting of 10 functional departments conducted on-site inspections of project construction, focusing on the implementation of the *Project Management Manual*. *Based on the MCC Project Inspection Checklist*, the team performed comprehensive and detailed inspections on 18 aspects, including project planning, schedule management, business management, design management, quality control, and safety production. They also provided professional guidance to further enhance the level of MCC's project fulfillment management and project profitability.



Inspection of the large-scale fulfillment system for the Shenzhen Integrated Traditional Chinese and Western Medicine Hospital project

### Awards for quality

MCC is committed to providing better quality and reliable engineering products and services. In 2024, the Company achieved a record number of award-winning projects, a testament to its strong commitment to excellence in product quality management.

#### The number of quality-related awards won by MCC in 2024

407 Items	355 Items
Provincial (Ministerial)	Provincial (Ministerial)
Engineering Quality	Engineering Design
Awards	Awards

### 🕀 Work Safety

MCC remains at the forefront of the industry in work safety supported by a comprehensive safety management system and strict risk prevention measures. We actively shape industry safety standards, foster a strong safety culture, and continuously enhance our safety management capabilities.

### Safety management system

Upholding the principle of "people and life first", MCC strictly complies with national safety laws and regulations, including the Work Safety Law of the People's Republic of China, the Regulation on Work Safety Permits, and the Administrative Regulations on the Work Safety of Construction Projects. The Company has established various safety management policies, such as the Regulations on the Establishment of Safety Management Institutions and the Allocation of Full-Time Safety Production Managers, the Safety Production Management Evaluation Measures, and the Safety and Environmental Protection Assessment Implementation Rules. Additionally, MCC has revised the Safety and Environmental Protection Incident Accountability and Reward/Penalty Implementation Rules, further advancing the development of its safety management system.

MCC places a strong emphasis on leadership responsibility in safety management. We have established a Safety Production

### Safety risk prevention

MCC upholds strict safety standards and strengthens fundamental safety production management. The Company conducts regional "package" inspections and specialized safety checks, with a focus on high-risk industries and key operational processes. In 2024, MCC intensified safety inspections and hazard identification efforts, expanding its regional inspection approach to include systematic risk assessments in sectors like expressways, hazardous chemicals, and explosives. This initiative aimed to proactively mitigate major safety risks. During holidays and other special periods, MCC organized comprehensive safety production inspections, ensuring full coverage and timely rectifications.

In response to the risks associated with high-altitude work, MCC launched a special campaign to prevent falls. The Company developed and issued the Standardized *Safety Protection Manual for High-Altitude Operations*. The manual outlines 24 typical high-altitude work scenarios, and refines control measures to enhance proactive accident prevention capabilities.



Committee to set safety policies, review major safety matters, and supervise their implementation to ensure safe operations. To reinforce leadership accountability, we implement a Chief Safety Officer system and enforce on-site leadership inspection protocols. In 2024, we introduced a leadership inspection application that customizes inspection content and standardizes evaluation criteria. This initiative has enhanced leadership supervision and ensured effective implementation of the "dual responsibility" system.

To clarify and strengthen safety responsibilities, MCC annually signs a *Safety and Environmental Protection Target Responsibility Certificate* with 37 subsidiaries. This agreement sets the target of zero responsible accidents and zero work-related fatalities, and ensures that all subsidiaries fully assume responsibility for safety management, thereby improving the Company's overall safety management standards.

### Leading the industry in safety standards

MCC continues to advance the development of high-standard safety regulations, ensuring safe production practices and setting industry benchmarks for safety management.

First prize

3

28

National "Construction Work Safety for Construction Projects"

475

Provincial and municipal safe, civilized and standardized construction sites

### Safety culture development

MCC is committed to strengthening its safety culture by promoting safety awareness, organizing emergency drills, and enhancing employees' understanding of safety practices and emergency response skills. By the end of the reporting period, MCC had launched a variety of "Safety Production Month" events under the theme "Let Everyone Value Safety and Learn Emergency Response". Every subsidiary participated in these initiatives, organizing 2,669 emergency drills with over 105,000 participants. MCC organized 2,654 on-site "Safety Awareness and Consultation Day" events, engaging more than 93,000 participants, and fostering a strong safety culture.



Subsidiaries actively participated in the 5th Safety Science and Technology

🛿 Second prizes 🌂

Third prizes

Award organized by the China Association of Work Safety, winning

**15** safety technology application prizes

#### MCC held the 2024 "Safety Production Month" launching ceremony

In June 2024, MCC held its 2024 "Safety Production Month" launching ceremony in Tianjin, and attracted wide engagement by using a hybrid format of on-site participation and cloud-based live streaming. On-site attendees included 225 key personnel, such as representatives from MCC's Safety Supervision Department, senior safety executives from Beijing-Tianjin-Hebei regional subsidiaries, third-tier subsidiaries in Tianjin, project managers, and safety supervisors. Simultaneously, the event was broadcast via a cloud-based live-streaming platform, reaching approximately 19,900 terminals. This event ensured broad participation and effectively enhanced employees' safety awareness through a combination of online and offline engagement strategies.



The 2024 "Safety Production Month" launching ceremony

### □ Project management

MCC continues to play a demonstration and leadership role in major projects by setting high benchmarks for project execution. To standardize processes and enhance overall efficiency, the Company released the Project Management Manual to standardize project management processes, and enhance overall production as well as compliance efficiency. To support effective implementation, MCC developed a systematic and quantifiable project inspection checklist. This checklist serves as a practical guide for conducting comprehensive on-site inspections. When issues are identified, strict corrective measures are enforced-requiring responsible teams to resolve the issues within a specified timeframe and provide feedback. This approach establishes a closed-loop management system, ensuring that every stage—from inspection to rectification-is executed thoroughly and efficiently.

Society

Upholding its core management concept of "project first," MCC has developed a "small front-end, large back-end" system to accelerate the standardization of project management practices. In January 2024, the Company launched an integrated digital management platform designed to centralize and streamline project oversight. This platform integrates solution development, data collection, UI design, and data validation. The system ensures full data connectivity across engineering subsidiaries, helping to standardize data, enhance project oversight, and support closed-loop management for core business operations. It also incorporates real-time tracking mechanisms to monitor progress, significantly improving management efficiency and ensuring timely project execution.

To encourage collaboration and knowledge-sharing within and beyond the industry, MCC organizes project management forums and on-site observation events, providing an interactive platform for project management discussions. The Company also organizes professional training programs for project managers, covering more than 10 key topics, including construction industry trends, large-scale business management, legal risks, and intelligent construction, aimed at enhancing professional expertise and leadership skills. In its commitment to building supportive and well-managed project teams, MCC prioritizes petition handling and social stability measures by introducing a "One-Stop Management, Full-Process Service" approach, which has gained widespread recognition from various sectors of society.

### MCC hosted the Second Project Management Forum

In July 2024, MCC successfully hosted the Second Project Management Forum in Changchun. With the theme of "Strengthening Fundamental Management, Driving Transformation and Upgrading", the forum focused on the dual objectives of efficiency and effectiveness. Discussions covered key topics such as EPC project commercial management, the implementation of the Project Management Manual, project digitalization, collaborative value creation, and project Party-building. Participants explored strategies for building an efficient project management system under new conditions, enhancing fundamental management capabilities, improving project compliance and execution.



The second Project Management Forum

### **One Core: Metallurgical construction**



Baosteel Zhanjiang Steel Zero-Carbon Project



Yunnan Yukun Steel Project

Sinotrans Dubai South Free Trade Zone Project



Xiong'an International Trade Center Project



Xinjiang Huoshaoyun Lead-Zinc Smelting Project









Liuzhou Highway Bypass Project (Luocheng-Liucheng-Luzhai Section)

### Five Characteristics: Mineral resources, Engineering services, New materials, High-end equipment, Energy and environmental protection



Ramu Nickel-Cobalt Mine Project, Papua New Guinea

Vietnam Hoa Phat Dung Quat Steel Plant Project



Zhonggui High-Tech Electronic Information Materials Transformation and Upgrade Project



Unmanned Electric-Driven Slag Transport Truck

### **Two Subjects: Housing construction and Municipal infrastructure**



Chongqing Jianglong Expressway rejuvenation Yangtze River Bridge project



Hengli Group Shenzhen Bay super headquarters base main projec



South-to-North Water Diversion New Energy Kuancheng Ground-Based Distributed Photovoltaic Project

🔁 Supply chain management

MCC is focused on strengthening and refining its supplier management system, aiming to build a supply chain that is trustworthy, transparent, compliant, and sustainable. Integrity, fairness, and environmental responsibility remain at the core of this approach. In 2024, the Company revised several key regulatory documents, including the MCC Group and *MCC Procurement Management Regulations, Measures for the Management of Suppliers of MCC Group and MCC*, and the *MCC Group and MCC Procurement Implementation Management Measures*. These updates were designed to enhance both the efficiency and effectiveness of supplier governance. Additionally, MCC introduced a tiered supplier management system supported by a comprehensive, full-process management framework. This system is built on four key principles, "centralized oversight, tiered implementation, dynamic evaluation, and quality-driven selection". The framework covers every stage of supplier management, from admission and assessment to exit procedures, ensuring a structured and consistent approach to supplier governance.

#### Number and distribution of MCC suppliers

In 2024 Unit (Supplier)



### **Supplier admission**

MCC follows a thorough process for evaluating and selecting suppliers who have registered on its procurement bidding information platform. The selection process includes communication, assessments, sample testing, and on-site inspections. Priority is given to suppliers with strong reputations, well-established management systems, and internationally recognized certifications, such as ISO 14001, ISO 45001, and ISO 9001. MCC strictly avoids cooperation with suppliers that have serious negative records.

### Supplier assessment and exit mechanism

To ensure continuous quality and compliance, MCC operates a "dynamic assessment and tiered management" system for supplier evaluations. The annual assessment process forms the basis for supplier classification and potential exit from the system. Based on assessment results, suppliers are categorized into four credit rating levels. Additionally, MCC has established the *Blacklist Supplier Management System*. Suppliers found to be in serious breach of contract, misconduct, or other violations are immediately blacklisted. Once blacklisted, all business cooperation is terminated across the Company.

### Sustainable supply chain

Adhering to the philosophy of "harmony and coexistence, shared responsibility, innovative win-win, and open collaboration", MCC is committed to strengthening its supply chain management. The Company fosters stronger partnerships with suppliers to ensure supply chain stability and long-term sustainability. MCC conducts in-depth evaluations of supplier performance in key areas such as environmental protection, labor management, and raw material traceability to identify and mitigate potential sustainability risks. To promote green and low-carbon development, MCC explicitly includes these requirements in procurement documents and prioritizes materials, products, and services that are energy-saving, water-efficient, and environmentally friendly.

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MCC continues to enhance its ESG supply chain management framework, integrating sustainability into supplier selection, contract management, and logistics operations. By collaborating closely with suppliers, MCC promotes sustainable practices while effectively preventing and controlling ESG risks.

#### Supplier Selection and Evaluation

Conducts rigorous assessments of suppliers' environmental and social performance. Avoids suppliers that fail to meet environmental standards or have labor compliance issues.

### responsibilities to m ambiguous clauses.

### **Customer service**

MCC is committed to delivering high-quality, efficient services by upholding a client-centered approach. To strengthen its customer management framework, the Company has established the *MCC Management Measures for Domestic Major Customers*. During the reporting period, MCC developed comprehensive, customer-tailored solutions, ensuring a precise and responsive approach to meeting client needs.



\*The statistical scope of this data includes the annual customer satisfaction and complaint numbers of MCC Real Estate Group.

MCC has won widespread recognition with its wholesome dedication and wholehearted commitment to service, deep understanding and precisely meeting customer needs. In 2024, MCC received numerous letters of appreciation from clients, highlighting its industry leadership and strong sense of responsibility.

MCC's leadership actively engaged in dialogues with key government agencies and major enterprises, conducting over 60 high-level exchanges throughout the year. These efforts effectively expanded market opportunities and deepened cooperation between central and local governments.



#### Contract Management

Ensures contracts comply with domestic and international regulations. Clearly defines suppliers' compliance responsibilities to mitigate risks from

### Logistics and Transportation

Focuses on the safety and compliance of transportation methods. Reduces non-compliant operations in logistics to minimize legal disputes and cargo loss risks.

#### MCC's specific ESG management measures for the supply chain

Number of major customer complaints

Complaint handling closure rate





Letters of appreciation from SASAC and clients in various regions



Exchange and discussion between MCC and the Shenzhen Municipal Government

Promoting **Talent Growth** 

As a leader in China's metallurgical construction sector, MCC views talent development as a key driver of corporate growth. The Company offers diverse career development platforms and structured training programs to empower employees and support their long-term professional advancement. MCC also prioritizes the physical and mental well-being of its employees, fostering a caring and inclusive culture. We are committed to ensuring comprehensive health and safety protection.

### **Compliance in employment**

MCC strictly abides by labor laws and regulations, including the Labor Law of the People's Republic of China, Labor Contract Law of the People's Republic of China, Employment Promotion Law of the People's Republic of China, Law of the People's Republic of China on the Protection of Women's Rights and Interests, and Law of the People's Republic of China on the Protection of Disabled Persons, Regulations of Paid Annual Leave of Employees. The Company pursues equality and non-discrimination in employment practices, arranges employees' vacations reasonably and stands firmly against the use of forced and child labor. In 2024, MCC achieved a 100% labor contract signing rate with its employees.

#### 2024 MCC Employment Status



Number of employees by region 86,023 11,466 • China (including Hong Overseas Kong, Macao and Taiwan)



### **Talent attraction**

MCC fully leverages its leading and exemplary role as a central enterprise, actively fulfills social responsibilities, facilitates talent recruitment channels, and contributes to stabilizing and ensuring employment. In 2024, the Company thoroughly implemented the decisions made by the CPC Central Committee on promoting employment for university graduates, proactively establishing communication and interaction platforms between employers and graduates. To support this effort, MCC organized six campus job fairs to attract and recruit high-caliber graduates.

### □ □ Occupational health and safety

MCC strictly complies with the Work Safety, the Law on Prevention and Control of Occupational Diseases of the People's Republic of China, and other relevant laws and regulations. The Company has established and continually refined its occupational health and safety management system, clearly defining departmental responsibilities and enhancing its ability to prevent occupational hazards. In 2024, MCC successfully obtained ISO 45001 certification for its occupational health management system.

Society

MCC prioritizes the identification, assessment, and control of occupational hazards, conducting regular health check-ups and specialized supervision activities to ensure a safe working environment. The Company also reinforces occupational health and safety training to strengthen employees' awareness and self-protection skills. During the reporting period, there were no identified cases or suspected cases of occupational diseases or incidents of acute occupational poisoning.



In 2024, MCC actively launched the "Caring for Frontline Employees" occupational health check initiative, inviting external experts to conduct comprehensive and detailed health examinations for frontline employees. A temporary "Health Station" was set up onsite to provide a warm and supportive environment for employees undergoing health assessments. In addition, medical workers tailor personalized health guidance based on frontline employees' work environments and occupational characteristics, delivering scientific health knowledge to enhance awareness of occupational health and safety and provide strong support for creating a healthier and safer working environment.

#### Number of employees by educational background



- Junior college education
- Junior high school education or below
- High school, technical secondary school or vocational school education

### Fechnological Innovation and Ouality Co-Building





2025 campus job fair in Northeastern University





MCC successfully obtained

### **ISO 45001** certification for its occupational health management system

Number of employees receiving occupational health and safety training



#### "Caring for Frontline Employees" health check initiative – innovating occupational health services



"Caring for Frontline Employees" health check initiative

### **Employee development**

MCC recognizes that talent is the driving force behind enterprise growth. The Company adheres to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implements the guiding principles of the 20th National Congress of the Communist Party of China (CPC) and the Second and Third Plenary Sessions of the 20th CPC Central Committee. Upholding the belief that "talent is the primary resource," MCC actively promotes strategies to attract, develop, and retain talent, providing strong human resources support for sustainable growth.

In 2024, MCC strengthened the ideological empowerment of Party members, organizing intensive training programs focused on Xi Jinping Thought and the guidelines of the Third Plenary Session. These efforts enhanced the political competence and theoretical proficiency of Party members and company executives. The Company also reinforced its professional talent development, marking the eighth consecutive year of hosting the Project Manager Training Program. Additional leadership and professional development initiatives included: Enterprise Leadership Development Training, "Micro-Lesson Empowerment and Development" Camp for Minmetals e-Learning Administrators, Xiaxian Professional Development Camp, Newly Appointed Frontline Manager Capability Enhancement Program, and Central SOE Team Leader Training Program. These programs significantly improved employees' professional skills and job-related competencies. MCC also standardized processes for professional title evaluations and vocational skill certifications, while advancing its position classification system to support clear career progression for various talent categories. During the reporting period, the Company provided training the number of employees trained reached over 93,300; the number of person-times trained reached more than 975,200; and the average training hours completed per employee reached 90.47 hours.

#### MCC held 2024 project manager training program

In November 2024, MCC held the 2024 Project Manager Training Program, emphasizing the critical responsibilities of project managers and analyzing the challenges and gaps they currently face. The program proposed enhancing the engineering management system, strengthening the commercial management framework, reinforcing safety management fundamentals, improving quality capability building, and upgrading platform application management as key strategies for improvement. A total of 102 participants attended the training in person, while approximately 17,000 people participated in the training online.



Opening Ceremony of manager training program

#### MCC's employee skills competition yielded outstanding results - success in both hosting and competing, with new breakthroughs in WorldSkills



Winner of the welding event at the 47th WorldSkills Competition

MCC has leveraged high-level vocational skills competitions as a key tool for talent development, and conducted regular skills competitions and job training programs, creating opportunities for outstanding talent to emerge. In 2024, MCC successfully hosted the finals of the second group vocational skills competition for building information modeling technicians, where participants from various subsidiaries demonstrated exceptional performance, achieving success in both hosting and competing. Additionally, MCC continued its role as China's national training base for welding and construction metalwork in the WorldSkills Competition. At the 47th WorldSkills Competition, MCC's competitors secured a silver medal, bringing the company's total WorldSkills medal count to 3 golds and 2 silvers. Moreover, the MCC team supported China's first-ever gold medal in the construction metalwork category, marking a historic breakthrough for the country in this event.



### Society

### **Employee care**

MCC continues to strengthen its employee care mechanisms, offering a variety of benefits beyond salaries while focusing on employees' physical and mental well-being. These efforts aim to enhance employees' sense of belonging and overall happiness.

### **Employee benefits**

MCC remains supporting employee welfare through comprehensive measures. Each year, the Company provides employees with critical illness insurance, supplemental commercial medical insurance, a health care fund, and free medical consultations, effectively alleviating financial burdens caused by health-related issues. In 2024, MCC recorded 10,201 instances of employee assistance, offering over RMB 4.6 million in financial and material support to employees in need. The MCC also prioritizes the wellbeing of retired employees by offering welfare benefits and visitation services in line with national policies. In 2024, the Company conducted multiple visits to retired employees, with special attention to those facing financial difficulties and retirees over the age of 90. These initiatives ensure the protection of retirees' legal rights and well-being.





### **Caring for overseas employees**

MCC values the well-being of its overseas employees and their families and has established a long-term support system for their career development and personal care. The Company is committed to improving working and living conditions abroad through various initiatives, such as sending letters of appreciation and organizing virtual meetings. These efforts aim to provide peace of mind for employees working overseas and reassurance for their families back home.

In February 2024, MCC's international subsidiaries organized the "Miles Apart, Hearts as One" virtual reunion for overseas employees and their families. At the meeting, overseas employees and their families made a video connection to convey their missing feelings. At the same time, the leaders responded to the needs and suggestions of employees and their families, creating a good atmosphere for two-way interaction.





#### MCC organized health lectures and free medical consultations to support employee well-being

In March 2024, MCC's Office invited a team of doctors from the East Branch of Emergency General Hospital to conduct a health lecture and free medical consultation event. The initiative provided employees with complimentary medical check-ups and health education, reinforcing the company's commitment to employee care. A total of over 80 employees participated in the event, which served as a comprehensive demonstration of MCC's dedication to employee health and well-being.

Health lecture and free medical consultation event



"Miles Apart, Hearts as One" virtual reunion for overseas employees and their families





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### **Employee activities**

In 2024, MCC and its subsidiaries actively organized diverse cultural and sports activities to enrich the leisure life and spiritual life of employees, and lead them to pursue a better life.









- 1. "Brilliance in Ink and Seal" Employee Calligraphy and Seal Engraving Exhibition
- 2. Fun Sports Games for Female Employees
- 3. Retirement Employees' Visit to Yanqi Lake
- 4. "Embrace the Golden Autumn, Expand the Market" Basketball Tournament
- 5. "Dancing Snakes for Prosperity A New Journey in the New Year" Themed New Year's celebration
- 6. "Together We Climb, United We Conquer" Themed Hiking Activity





雄安"迎金秋,拓市场

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- 7. "Be YOUNG Singing for the Future" Youth Singing Competition
- 8. "Ode to the Motherland, Love for CISDI" 2024 employee Cultural Performance
- 9. "Unfolding Imagination" Interactive Social Gathering and Market Event
- 10. May Fourth Youth Day Themed Activity
- 11. Collective Wedding Ceremony
- 12. "Crafting Dreams with Paper Celebrating National Day with Creativity" Paper-cutting Workshop
- 13. Winter Solstice feast—a taste of Warmth for Frontline Employees

Making **More Social Contributions** 

Under the framework of the BRI, MCC actively collaborates with governments, stakeholders, and partners from BRI countries. The Company is committed to fostering open, transparent, and institutionalized communication while contributing to rural revitalization and promoting community prosperity and sustainable development.

### **Ph Rural revitalization**

MCC remains committed to advancing China's rural revitalization strategy by supporting the comprehensive development of rural communities. Leveraging its expertise in engineering construction and resource development, the Company helps revitalize rural industries, nurture talent, promote local culture, protect the environment, and strengthen governance. These efforts contribute to agricultural modernization, rural growth, and the well-being of local farmers.

### **Consumption assistance**

MCC actively fulfills its social responsibility by supporting impoverished areas, revolutionary regions, and ethnic minority communities through consumption-based assistance. These efforts help farmers increase their income and achieve greater prosperity. In 2024, the Company allocated RMB17.36 million in targeted aid and paired assistance funds to its designated support counties. Additionally, MCC directly purchased agricultural products worth RMB 11.67 million from designated support counties and formerly impoverished regions. Leveraging its corporate influence, the Company further helped promote and market local agricultural products, with total sales of RMB 23.53 million.





Love and care initiative

Industrial assistance

MCC focuses on supporting rural characteristic industries by strengthening assistance to designated areas. The Company promotes the transformation and upgrading of rural industries, helping expand income sources for farmers and consolidating the achievements of poverty alleviation. Due to its outstanding contributions, the project was recognized in the 2024 Blue Book on Corporate Social Responsibility of Central Enterprises as a model case for promoting common prosperity.

Society

#### MCC built the "Peach & Pear Delight" agricultural demonstration park to empower rural revitalization



Heishui Town "Peach & Pear Delight" agricultural demonstration park

**Engineering assistance** 

MCC places great importance on improving rural infrastructure, enhancing living environments, and creating harmonious and livable communities



which is in line with China's rural revitalization strategy. It will serve as a demonstration base benefiting 300,000 residents of Dongfeng County, promoting economic development, job creation, and the advancement of the livestock industry.

MCC launched a rural revitalization project in Heishui Town, Yanhe County, Guizhou Province, investing over RMB 30 million over five consecutive years. Relying the MCC Research Institute of Beautiful Villages and Smart Cities, the Company carried out a comprehensive development plan for the "Peach & Pear Delight" agricultural demonstration park. This demonstration park is designed to align with China's five key rural revitalization goals, integrating agricultural industry development as its foundation, modern ecological farming and breeding technologies as its support, regional cultural heritage as a key feature, and rural leisure tourism as a breakthrough initiative. The project has achieved an annual output value exceeding RMB 2.2 million and has provided employment opportunities for 8,000 residents across five neighboring villages. Additionally, it has trained 1,130 industry professionals and increased the annual per capita income of village collectives by over RMB10,000.

Rural revitalization livestock farming demonstration base infrastructure project in Dongfeng County

□→ Community welfare

MCC is guided by the principles of high standards, sustainability, and public well-being, actively investing in community development and social responsibility initiatives. The Company is committed to philanthropy, supporting education, healthcare, and community assistance. MCC participates in the construction of medical facilities and takes proactive steps to fulfill its social responsibilities. At the same time, MCC promotes fair treatment of small and medium-sized enterprises (SMEs) by building collaborative platforms, sharing resources, and creating opportunities. The Company works closely with stakeholders to drive sustainable economic and social development.

### **Disaster relief**

MCC remains dedicated to the philosophy of "putting people first and serving society". In response to emergencies, the Company leverages its resources and expertise to swiftly mobilize rescue and relief efforts. With extensive engineering experience and strong technical reserves, MCC develops scientific rescue plans and organizes efficient operations, creating a solid defense to protect lives and property.



#### MCC responded rapidly to earthquake relief in Qinghai

In January 2024, upon receiving an urgent disaster relief request from the Qinghai provincial government, MCC swiftly coordinated the deployment of 200 prefabricated mobile homes and supporting living facilities. Overcoming severe weather conditions such as heavy fog and freezing temperatures, MCC successfully transported the supplies over 200 kilometers to the earthquake-stricken area in Xunhua County, Haidong City. This initiative demonstrated MCC's efficient emergency response capabilities and delivered warmth and hope to affected residents, embodying its commitment to "putting people first and serving the society"



MCC's relief supplies arriving at the centralized placement site in Xunhua, Qinghai



MCC's prefabricated housing units for post-earthquake relief in Jiezi Town, Xunhua Salar Autonomous County, Qinghai

#### MCC technical team provided post-disaster housing safety assessments in Zixing

In July 2024, Typhoon "Gaemi" caused severe flooding in Zixing City, Hunan Province. In response to an urgent request from the Hunan Provincial Department of Housing and Urban-Rural Development, MCC swiftly assembled a team of experts and dispatched them to the disaster-affected area in August. Despite power outages, damaged roads, and extreme heat, the expert team conducted on-foot assessments across four townships, including Bamianshan Yao Township. Over the course of a week, they thoroughly inspected 540 damaged houses, providing accurate evaluations of their structural safety. Their assessments offered critical scientific guidance for post-disaster reconstruction efforts. By leveraging its technical expertise and professional capabilities. MCC actively contributed to helping disaster-stricken communities rebuild their homes. Through this initiative, the company reaffirmed its commitment to fulfilling its corporate social responsibility and supporting disaster recovery efforts.



MCC experts conducted assessments in challenging terrain





### Public welfare and charitable undertakings

MCC actively responds to the Party and national initiatives, and embraces the volunteer spirit of "dedication, goodwill, mutual assistance, and progress". The company remains deeply committed to key livelihood issues such as education, healthcare, and elderly care, extensively engaging in various public welfare projects. MCC also actively mobilizes employees to participate in diverse community service activities. In 2024, MCC carried out charitable donations covering areas such as scientific education, healthcare, cultural and sports development, public infrastructure, and humanitarian aid. The company executed 38 donation initiatives, with a total contribution of RMB 5.4118 million.

### Protecting the rights of migrant workers

MCC adheres to the philosophy of "people and life first" and actively promotes innovative management models for migrant workers. The company strictly complies with the Regulations on Ensuring the Payment of Migrant Workers' Wages issued by the State Council, and implements the "Dual Identity, Unified Management" approach to enhance real-name registration and wage payment management. Furthermore, MCC has proactively launched initiatives such as the "Secure Wage Action" and the "Winter Special Campaign for Wage Arrears Governance", effectively preventing wage arrears. In addition, the company enhances vocational training, education, and worker support programs, facilitating the transition of migrant workers from "labor-intensive employment" to "skill-based development". In 2024, MCC established a real-name management information system, which enabled real-time attendance tracking and ensured timely wage payments for migrant workers.

### MCC pioneered "one-stop management" to safeguard migrant worker rights

MCC pioneered the "one-stop management, fullprocess service" model, setting up comprehensive service centers in Xiong'an New Area to provide convenient and standardized support for migrant workers. In 2024, multiple MCC projects in Xiong'an New Area were consistently recognized as "Star-Rated Warm-Hearted Projects for Migrant Workers" and "Five-Star Centers for Migrant Worker Rights Protection" for four consecutive guarters. This model is now being progressively adopted in other construction projects across the area.

### Affordable housing construction

MCC actively supports the national initiative for building a housing security system, leveraging its expertise to contribute to affordable housing renovation projects across various regions. In 2024, MCC subsidiaries undertook 37 affordable housing projects, covering an area of 9.1174 million square meters, addressing essential housing needs.





Jiading Jinhong community affordable housing project



One-stop management service center for migrant workers

In 2024, to further strengthen its strategic cooperation with the Jiading District Government and fulfill its social responsibility. MCC actively participated in the Jiading Jinhong Community Affordable Housing Project. With a total investment of approximately RMB 3.2 billion, the project is expected to provide More than 1,300 affordable housing units upon completion, and meet the resettlement needs of residents in Jinhong Community, Jiangqiao Town, Jiading District. This project plays a crucial role in improving residents' living standards, enhancing regional competitiveness, and advancing Shanghai's "Four-in-One" housing security system.

□ Joint efforts in the BRI

MCC is committed to advancing the Belt and Road Initiative (BRI) by implementing its "Five Core Essentials" and executing the "Five Action Plans" strategy. The Company aims to foster close economic cooperation networks and promote shared prosperity and sustainable development among participating countries.

### **Overseas project development**

Guided by the principles of open cooperation and mutual benefit, MCC leverages its advanced technologies, products, and services to contribute to the economic growth of BRI regions. The Company is dedicated to building a responsible state-owned enterprise brand and partnering with countries along the BRI to promote mutual progress.

MCC has established over 130 overseas institutions across 50 countries and regions, focusing on key BRI areas. The Company owns seven overseas mines, of which three are currently in production.



#### MCC contributed to the BRI by establishing the largest steelmaking base in Southeast Asia

On December 24, 2024, the No.1 blast furnace of the Vietnam Hoa Phat Dung Quat Steel Plant phase II 2×2500m<sup>3</sup> blast furnace ironmaking project, contracted by WISDRI, was successfully ignited. The next day, on December 25, the first batch of molten iron was successfully produced, and the Hoa Phat Phase II Railway EPC Project was simultaneously put into operation. The Vietnam Hoa Phat Dung Quat Steel Plant Phase II project cluster, undertaken by MCC South, consists of six projects, including: 2×2500m<sup>3</sup> blast furnace ironmaking EPC, 2×300t steelmaking EPC, railway EPC, hot rolling water treatment EPC, hot rolling leveling EP, hot rolling recoiling EP. The project integrates cutting-edge processes, proprietary technologies, and innovative equipment developed in China, further strengthening China's global construction brand. This initiative has propelled the Dung Quat Steel Plant to surpass an annual production capacity of 10 million tonnes, making it the largest steel production base in Vietnam and Southeast Asia.



Vietnam Hoa Phat Dung Quat Steel Plant phase-II project group

#### een Leadership and Ecological

Society

### Engaging in overseas communities

MCC is committed to improving the livelihoods of communities surrounding its projects, promoting regional prosperity through collaboration and support. The Company provides essential resources, financial assistance, and practical skills to local residents. MCC values close communication and cooperation with local governments, community organizations, and residents. Beyond integrating power and water infrastructure into project sites, MCC actively supports the construction of roads, educational institutions, and healthcare facilities. The Company also contributes by donating medical equipment and school supplies.





Built infrastructure for a school in Papua New Guinea



Eid al-Fitr warmth-spreading event in Pakistan

Robust Operation and Shared Responsibility



Joined the festive parade at Grenada Carnival



Supported underprivileged communities in Singapore



## **Robust Operation and Shared Responsibility**

MCC is guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, using it as the foundation for continuously improving its governance framework and decisionmaking processes. The Company upholds compliance as a core principle, integrating responsible development and risk control awareness into every aspect of its operations. As a central SOE, MCC demonstrates its commitment to responsibility through concrete actions. Meanwhile, the Company strictly adheres to business ethics, promotes fair market competition, and earns trust through integrity-based operations.

Implementing Corporate Governance

MCC is committed to promoting steady corporate development through strong management and a clear governance framework. The Company continuously enhances the professionalism, independence, and diversity of its board, ensuring that board members and senior management effectively fulfill their responsibilities. These efforts provide strong safeguards for shareholder interests and support the Company's sustainable growth.

### **□** Corporate governance system

MCC is fully committed to high-quality development, strictly adhering to the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, and relevant regulations in its operating regions. The Company revised the *Articles of Association of Metallurgical Corporation of China Ltd*, *Work System for Independent Directors of Metallurgical Corporation of China Ltd*, while introducing the *Rules of Procedure for Special Meetings of Independent Directors of Metallurgical Corporation of China Ltd*. These efforts have established a board-centric governance system marked by clear responsibilities, mutual coordination, and checks and balances, laying a solid foundation for stable operations.



During the reporting period, MCC thoroughly implemented President Xi Jinping's directives on SOE reform, development, and Party building, while actively meeting SASAC's requirements for SOE reform. The Company advanced its reform initiatives by optimizing the board authorization system to stimulate internal motivation, refining decision-making processes, and improving operational efficiency and effectiveness.

### Board Independence

MCC recognizes the importance of board independence in strengthening risk management and internal control. To support this, the Company developed the *Work System for Independent Directors of Metallurgical Corporation of China Ltd* and the *Rules of Procedure for Special Meetings of Independent Directors of Metallurgical Corporation of China Ltd*, ensuring that decisions are guided by independent and objective insights. As of the end of the reporting period, the Board of Directors consisted of eight members, including four independent non-executive directors, accounting for 50% of the board composition.

Green Leadership and Ecological

### **Board Diversity**

MCC believes that a diverse and professional board is key to navigating an evolving business landscape. In line with the *Articles of Association of Metallurgical Corporation of China Ltd* and relevant regulations, the Company actively fosters a diverse and specialized board of directors. When selecting board members, MCC considers factors such as educational background, industry experience, expertise, professional knowledge, and tenure as a director. MCC's board included experts and scholars specializing in corporate management, finance, law, and human resources, ensuring well-rounded and informed decision-making. The board was composed of seven directors from the Chinese mainland (including one female director) and one director from Hong Kong, meeting the diversity requirements of the Hong Kong Stock Exchange and aligned with MCC's gender diversity goals.

### **⊡** Investor communication

To protect investor rights, enhance market recognition, and support value realization, MCC developed the *Information Disclosure Management System of Metallurgical Corporation of China Ltd* and strengthened its disclosure framework. This ensures the protection of shareholders, creditors, and other stakeholders' rights. MCC maintains open communication with investors through various channels, including shareholders' meetings, briefing sessions, roadshows, reverse roadshows, analysts' meetings, on-site surveys, visits, and participation in stakeholder strategy meetings and forums. These efforts promote transparency and ensure effective engagement with the capital market.



Additionally, we facilitated open communication with minority investors and the general public by hosting the 2024 "New Energy & New Materials" thematic reverse roadshow, addressing investors' legitimate concerns.



## Enhancing fundamental management

MCC has launched a three-year initiative to strengthen fundamental management, focusing on three key areas: systems, institutions, and personnel. The goal is to enhance management standards and capabilities across nine core business systems, including marketing, project execution, financial management, investment, party building, discipline and integrity supervision, legal compliance, technological innovation, enterprise informatization, and digitalization. As of 2024, MCC had strengthened these systems through targeted improvements in institutional frameworks, personnel structures, and policy development. Efforts focused on addressing weaknesses and reinforcing key areas, leading to notable progress in management concepts, governance frameworks, operational processes, work mechanisms, and talent development. Significant advancements were made in building systems for investment, market expansion, project execution, safety, compliance, and digitalization, effectively reducing major risks.

organized performance communication meetings

was honored with

3

the 15th China Listed Companies Investor Relations Tianma Award

"New Energy & New Materials" thematic reverse roadshow

## Strengthening **Risk** Management

Compliance with laws and regulations is fundamental to MCC' s pursuit of highquality development. The Company continuously refines its risk response strategies, strengthens risk management mechanisms, and enhances the effectiveness of risk control. By closely monitoring internal and external changes, MCC conducts thorough risk identification and control, striving to implement precise, objective, and comprehensive risk management to ensure stable operations.

### □ **Risk control**

MCC follows a risk management strategy of "seeking progress while maintaining stability and advancing through stability". The Company standardizes processes for risk identification, analysis, assessment, and response, reinforcing risk control as a safeguard for sustainable growth. MCC has formulated internal policies such as the MCC Group Administrative Measures for Risk Management Reporting and MCC Working Rules of the Board of Directors Financial and Audit Committee, establishing a comprehensive closed-loop management mechanism that integrates proactive risk forecasting and early warning, ongoing risk monitoring and supervision, and post-event risk reporting and resolution. This approach ensures end-to-end risk control, effectively managing major risks. During the reporting period, no systemic or disruptive risk events occurred.



In 2024, MCC formulated the 2024 Internal Control Evaluation Plan in accordance with the Basic Norms for Enterprise Internal Control and its supporting guidelines issued by the Ministry of Finance, as well as relevant regulations from SASAC on comprehensive risk management, internal control system development, and supervision for central enterprises. The evaluation combined self-assessment and supervisory evaluation, focusing on the Company's core development objectives. This approach strengthened internal control mechanisms, refined MCC's internal management system, and contributed to long-term, sustainable growth.

### □→ Compliance management

MCC has advanced its Compliance Management System by standardizing operational processes and ensuring timely rectification of compliance issues. This approach aligns business development and operations with regulatory requirements. In 2024, MCC further refined its compliance management framework and enhanced related policies to ensure the effective implementation of compliance practices.

### Implementing compliance accountability

MCC has established a three-tier risk management system comprising the Compliance Management Committee, the Legal & Contract Management Department, headquarters departments, and subsidiaries. In 2024, the Company successfully obtained GB/T 35770 Compliance Management System / ISO 37301 Compliance Management System certification, further standardizing its compliance operations.

The Company has integrated compliance management requirements into key positions, adhering to the MCC Group and MCC Compliance Management Checklist, and MCC Group and MCC 2023 Legal Compliance Excellence Evaluation Plan. The Company has also revised the Basic Internal Control System and introduced the Implementation Plan for the Establishment and Staffing of Legal Compliance Management Institutions and the Project Legal Compliance Management Measures, clarify the compliance responsibilities of each functional department, improve the employee incentive mechanism, and enhance the enthusiasm of compliance staff. Each subsidiary enterprise shall explore and carry out other types of medium and long-term incentive work based on its actual conditions, unify project returns, corporate benefits, and employee income, and improve the initiative of employees in their work.

### **Issuing key work plans**

MCC conducted annual legal and compliance evaluations based on the MCC Group and MCC 2023 Legal (Compliance) Work Evaluation Implementation Plan. Building on this, the Company implemented the MCC Group and MCC 2024 Legal Compliance Work Evaluation Implementation Plan and the MCC Group and MCC 2024 Compliance Management Enhancement Plan to ensure the effective execution of annual compliance tasks. In 2024, MCC optimized seven precision improvement indicators and signed the 2024 Case Management Target Task Agreement. For key subsidiaries, the Company issued supervisory directives, reinforced major case oversight, and organized expert consultations, while dynamically maintaining a supervisory task list and risk notification mechanism to effectively address complex and high-risk cases. Additionally, MCC conducted comprehensive overseas legal and compliance risk assessments, formulated risk mitigation measures, and ensured effective corrective actions.

### Strengthening compliance education and awareness

MCC actively promotes compliance education through various campaigns and training programs to enhance employee awareness. In 2024, the Company organized 16 legal awareness campaigns, provided 650 instances of legal support for projects, and engaged 13,500 person-times in compliance-related activities.

MCC organized the new corporate law awareness lecture for state-owned enterprises, providing an in-depth explanation of key aspects of the Company Law of the People's Republic of China. This initiative improved the ability of employees to govern enterprises according to law, and effectively strengthened the expertise of employees in corporate governance and compliance management.



The new corporate law awareness lecture for state-owned enterprises
# Upholding **Business Ethics**

MCC upholds a strong and efficient business ethics framework, integrating business integrity with corporate responsibility to ensure sustainable and compliant operations. During the reporting period, MCC continued to strengthen its business ethics framework, driving the Company's sustainable development while demonstrating the social responsibility and mission of a central enterprise.

## **□** Anti-corruption actions

MCC prioritizes its "Anti-Corruption+" strategy, strictly adhering to regulatory policies such as Provisions on the Liability System for Party Conduct and Clean Governance of MCC Group, MCC Integrity Risk Prevention and Control Management Measures, MCC Anti-Commercial Bribery Compliance Guidelines, and Regulations on Handling Informant Reports. The Company actively promotes disciplinary and anti-corruption initiatives to build a transparent and compliant business environment. MCC implements targeted, refined, and regular political oversight, adhering to the principle of strict and comprehensive governance to deter, prevent, and eliminate corruption at all levels. In 2024, there were no reported litigation cases related to corruption involving the Company or its employees.

#### **Establishing an anti-corruption mechanism**

We adhere to the integrated promotion of not daring to corrupt, not able to corrupt, do not want to corrupt. In doing so, we strictly implement the requirements of the MCC Group Party Committee's Specific Measures for Implementing the Opinions of the CPC Central Committee on Strengthening Supervision of "Top Leaders" and Leadership Teams, and effectively reinforce intra-level supervision. We promote the accountability system by organizing the lead disciplinary committees of key subsidiaries within responsibility areas to conduct regular inspections on issues related to the "Four Malpractices.". In accordance with the Three-Year Action Program for Building of a Good Party Culture and Integrity Supervision System of MCC (2023-2025), MCC takes the implementation of "5+3+2" system-building initiative as the starting point to further improve the comprehensive and strict Party governance system while strengthening coordination between discipline inspection, inspection and audit. At the same time, key departments are organized to regularly report integrity risk information every quarter, fostering a collaborative supervision model characterized by information sharing, joint problem-solving, and shared outcomes. and continuing to promote the effective operation of the "supervision and linkage" mechanism. This sustained effort effectively enhances the operational efficiency of the "coordinated supervision" mechanism.

#### **Enhancing anti-corruption oversight**

MCC is committed to maintaining a fair, open, and orderly market environment. In line with the MCC Anti-Commercial Bribery Compliance Guidelines, the Company has strengthened its anti-bribery supervision system to ensure employees uphold integrity and business ethics while strictly prohibiting bribery and other illicit activities.



#### **Regulating corruption reporting**

The Company strictly follows the Rules for Handling Informant Reports by Discipline Inspection and Supervision Agencies issued by the CPC Central Committee, ensuring that employees and stakeholders can confidentially report misconduct through official channels, including phone, email, and other designated platforms. Additionally, to safeguard informant confidentiality, MCC enforces strict confidentiality and recusal protocols throughout the investigation process. Under the informant protection mechanism, any acts of retaliation against informants are handled seriously and in accordance with the law, ensuring the personal safety of informants.



### □ Anti-corruption training

To strengthen ethical integrity and prevent corruption, MCC regularly organizes initiatives such as "Integrity Awareness Month," visits to integrity education bases, and various business ethics and anti-corruption training programs. These initiatives employ case-based learning, online courses, exchanges with leading enterprises, and the publication of the MCC Group Compilation of Typical Case Warnings, fostering a strong culture of integrity and anti-corruption. In 2024, MCC held multiple "Integrity Awareness Month" activities, including education conferences, exhibitions, and special seminars, engaging a total of 183,863 person-times.





#### In 2024

engaging Integrity Awareness Month activities

# 183,863 person-times

Integrity education exhibition

MCC convened the Party conduct, clean governance and anti-corruption work conference, and warning education seminar

In February 2024, MCC convened the Party conduct, clean governance and anti-corruption work conference, and warning education seminar to review and summarize related efforts in 2023, while outlining key tasks for 2024. During the conference, we facilitated the signing of the *Responsibility Statement on Party Conduct and Clean Governance Building* between Party secretaries, leadership team members, and subsidiary Party organizations. This initiative reinforced the "first responsible person" principle and the "dual responsibility" system, ensuring the effective implementation of integrity-building and anti-corruption measures.



The Party conduct, clean governance and anti-corruption work conference, and warning education seminar

## **□** Anti-unfair competition

MCC is committed to maintaining a fair and just corporate environment by strictly adhering to the *Anti-Unfair Competition Law* and the *Anti-Monopoly Law of the People's Republic of China*. The Company has established internal policies, including the MCC Group Anti-Fraud Compliance Guidelines, which apply to all employees and business partners. These measures aim to support a fair and competitive market environment, and oppose unfair competition, monopolistic behavior, and money laundering activities. In 2024, MCC did not experience any litigation or major administrative penalties related to unfair competition practices.



# Information Security and Privacy Protection

MCC takes full responsibility for information security and privacy protection. The Company is accelerating the development of its critical information infrastructure security system, utilizing real-time cybersecurity situational awareness technologies to monitor, detect, and respond to potential threats. These measures ensure a rapid response and effective resolution of security incidents. MCC places strong emphasis on customer privacy, complying with relevant laws and regulations, and establishing a comprehensive privacy protection mechanism. This ensures that data processing, storage, and transmission meet privacy standards, effectively safeguarding customers' personal information.

### **Establishing an information management mechanism**

MCC prioritizes information security incident management and The Company continuously strengthens its privacy protection business continuity management, and strictly complies with the capabilities, aligning with the Personal Information Protection *Cybersecurity Law of the People's Republic of China* to protect Law of the People's Republic of China. MCC has formulated core assets and customer data. To enhance security measures, internal management policies, such as the Privacy and Security MCC has established a dedicated task force to develop policy guidelines, to regulate data handling and prevent breaches, frameworks and implement emergency response mechanisms, damage, or loss. The Company ensures that users are fully informed and provide explicit consent before their personal data implement emergency response mechanisms, and conduct simulated cyberattack defense drills. These efforts effectively is collected, processed, or used, safeguarding their legal rights mitigate risks that could arise from business disruptions, and privacy. In 2024, MCC recorded zero incidents of customer ensuring the protection of customer interests. data breaches.

### **D** Strengthening information security assurance

The Company implements the "Digital Minmetals" strategy, promoting high-quality, efficient operations guided by the concept of multi-skilled roles and cross-functional capabilities. The Company actively leads efforts to enhance information security and privacy protection across its subsidiaries. Meanwhile, by establishing dedicated task forces, organizing expert-led inspections and rectifications, and conducting awareness campaigns, the Company effectively reduces cyber and data security risks while fostering a strong culture of information security.

#### Key initiatives in 2024

Establishing	The Company required all second-tier	
dedicated task •	<i>Responsibility Commitment</i> and estal	
forces	strengthening management foundations.	
Cybersecurity protection	The Company enhanced cybersecurity po drills and 25 days of simulated attack a incidents during key security periods. In addition, the Company also deployed response measures for information secur	
Culture	The Company issued multiple notices suc	
promotion	organized two rounds of on-site culture pr	
	he signing process supervised the y subsidiaries implementation acro	

35

601



subsidiaries to sign the 2024 Cyber and Information Security ablish dedicated task forces, reinforcing accountability and

rotection during critical national events, conducting 13 specialized and defense exercises. These efforts ensured zero cybersecurity

l internal and external experts for on-site inspections, developing ity issues, and overseeing rectification.

h as the *Rules for the Autonomous and Controllable Task Force*, and pomotion and inspection campaigns conducted by internal experts.

oss units conducted reviews of subsidiaries cases 36 3

# **Committed to Digital and Intelligent Empowerment**

### □ Advancing industrial digitalization

MCC actively embraces digitalization and intelligent technology to accelerate its industrial digital transformation across areas such as management, construction, operations, maintenance, security, data, and performance assessment. In 2024, as part of its overall digital transformation strategy, the Company refined its digital evaluation framework, adjusting key metrics, including the Digitalization Level Assessment Data Collection Form and Evaluation Indicators for Information and Digital System Development. Using digital strategic planning as a driving force, MCC comprehensively improved its information management capabilities. Furthermore, the Company released version 1.2 of the MCC Group Digital Management Platform Key Components Guide and successfully deployed its headquarters' digital management platform. This platform now fully integrates essential functions such as project management, legal and contract management, and domestic market development, enabling more effective datadriven decision-making. By the end of the reporting period, the platform integrated the "One Enterprise, One Screen" system for 29 subsidiaries, recorded an average of nearly 200 daily logins, accumulated close to 100 million business data entries, and processed tens of millions of data records each month.

The Company closely follows the digital transformation trends in the construction industry and steadily implements smart site construction. By integrating technologies such as Building Information Modeling, 5G, big data, AI, cloud computing, and the Internet of Things (IoT), MCC has developed an intelligent information application platform that supports daily quality management, knowledge sharing, data integration, and intelligent process optimization at all levels. This platform enables real-time intelligent monitoring and efficient management of the key elements (people, machinery, materials, methods and environment). It provides technical solutions to enhance the integral control of quality, safety, and schedule.

#### MCC held the exchange and advancement meeting on the "Digital Enterprise Brain" initiative

On March 13, 2024, MCC held the exchange and advancement meeting on the "Digital Enterprise Brain" initiative in Beijing. The Company leaders elaborated on digital development strategies, challenges faced by subsidiaries, and future construction plans. They outlined six key requirements for subsidiaries in developing their "Digital Enterprise Brain", aiming to further strengthen its implementation, and leverage digitalization and informatization as drivers to support enterprise transformation and upgrading.



Exchange and advancement meeting on the "Digital Enterprise Brain" initiative

#### BIM Competition Awards won by MCC in 2024

The Construction Engineering BIM Competition

The Second-class



Achievement Awards **18** Items

The Third-class Achievement Awards

26 Items

## □ Digital industrialization

MCC, guided by the principle of "digital empowerment and industrial enablement", focuses on cutting-edge fields such as industrial internet and artificial intelligence. The Company develops an independently controlled digital product system and platform capabilities, fosters the deep integration of digital technologies with real industries, and injects new momentum into high-quality industry development.

Building a digital core hub to drive industrial digital transformation

MCC built a digital foundation centered on an industrial internet platform, encompassing all elements and the entire industry chain. This platform is distinguished by its high stability and fully independent, secure, and controllable adaptation. It enables comprehensive governance of IT and OT<sup>2</sup> data while facilitating the deep application and deployment of multiple self-developed technologies across industries and domains. Through extensive cross-industry and cross-domain applications, several platforms have been recognized by the Ministry of Industry and Information Technology (MIIT) as "Cross-Industry and Cross-Domain Industrial Internet Platforms", "Typical IT Application Innovation Solutions", and "Key Digital Transformation Cases in the Steel Industry", positioning MCC as a benchmark for industrial digital transformation.

#### Building China's first cloud infrastructure platform based on indigenous chips

MCC actively integrated into China's "channeling more computing resources from eastern areas to less developed western regions" strategy and collaborated with Huawei to develop China's first cloud infrastructure platform based on indigenous chips. This initiative built a solid base of capabilities in cloud technology, and established a robust foundational cloud computing system with 3,000 vCPU cloud resources. As one of the data-sharing centers designated by the SASAC, the platform was honored with the "Outstanding Digital Transformation Case Award" at the 2021 Global Cloud Computing Conference, providing strong support for the industry's digital transformation.



<sup>2</sup> OT, Operational Technology





A digital foundation empowered by data and integrated with business operations

# **Outlook for 2025**

The year 2025 marks the final year of the 14th Five-Year Plan and a crucial moment in shaping the 15th Five-Year Plan. Facing new challenges and responsibilities, MCC will remain committed to its "One Goal, Two Best, Five Strengths" vision, adhering to the principle of seeking progress while ensuring stability. The Company will fully implement new development concepts with precision, focusing on stabilizing growth, strengthening industries, driving innovation, advancing reforms, reducing costs, mitigating risks, and ensuring safety. These efforts aim to enhance core functions, sharpen core competitiveness, and achieve deeper transformation and upgrading.

MCC will reinforce strategic leadership, optimize organizational and business structures, and adhere to the principles of core business consolidation, industrial positioning, and resource integration. The Company will actively advance transformation and upgrading initiatives, focusing on strengthening core capabilities, refining core businesses, and expanding key differentiators. It will also carefully plan for the 15th Five-Year Plan, ensuring a solid foundation for high-quality development. Balancing development and security will be a priority. MCC will work to keep systemic risks contained and under control, aiming for steady economic growth, continuous improvements in operational quality, an optimized capital structure, and controlled debt risks. These efforts will lay the groundwork for sustainable corporate development. The Company will accelerate technological innovation, striving for breakthroughs in key technologies and advancing their commercialization. MCC will promote the deep integration of scientific

advancements with industrial applications, creating new competitive advantages for high-quality development. Driving green and low-carbon initiatives will be another focus. MCC will actively implement the national "dual-carbon" strategy, leveraging its expertise in energy conservation, green intelligence, new materials, and water treatment. It will also advance innovations in environmental protection and carbon reduction technologies. Talent development remains a strategic priority. MCC will expand career development pathways, refine compensation and incentive mechanisms, and foster a fair, inclusive, and harmonious workplace. These efforts will lay a strong talent foundation to drive new productive forces. As a central enterprise, MCC will continue to uphold its social responsibilities by actively supporting rural revitalization. It will leverage its extensive technical expertise and management experience in metallurgical engineering to expand infrastructure and develop emerging industries along the BRI, promoting shared prosperity and sustainable development.

The road stretches far and wide, yet we will strive to reach new heights. Guided by the "One Goal, Two Best, Five Strengths" vision, we will move forward with resolve, embrace bold innovation, and pursue relentless progress. Through practical actions and tangible results, we aim to elevate transformation and upgrading, drive high-quality development to new milestones, and write an extraordinary chapter of sustainable growth!



# **Key Performance Indicators**

## **Key Economic Indicators**

Key indicator	Unit	2024
Operating revenue	RMB Billion	552.025
Total profits	RMB Billion	9.255
Total value of newly signed contracts	RMB Billion	1,248.706
Total value of newly signed metallurgical engineering contracts	RMB Billion	168.573
Engineering contracting operating revenue	RMB Billion	501.450
Featured businesses operating revenue	RMB Billion	38.166
Comprehensive real estate business operating revenue	RMB Billion	18.753

### Key Environmental Indicators

### **Emissions and relevant statistics**

Key indicator	Unit	2024
SO <sub>2</sub>	Ton	33,302.67
NO <sub>x</sub>	Ton	1,920.11
Dust	Ton	30.63

### Greenhouse gas emissions

Key indicator		Unit	2024
Direct (Scope 1) greenhouse gas	Emission	Ton CO <sub>2</sub> e	2,239,015.95
Direct (Scope I) greenhouse gas	Emission intensity	Ton CO <sub>2</sub> e per RMB 10,000 revenue	0.0406
Indiract (Scope 2) groophouse gas	Emission	Ton CO <sub>2</sub> e	3,232,806.84
Indirect (Scope 2) greenhouse gas	Emission intensity	Ton $CO_2$ e per RMB 10,000 revenue	0.0586

#### Hazardous waste production

Key indicator	Unit	2024
Waste oil	Ton	33.06
Waste paint bucket	Ton	455.74
Emulsion	Ton	41.08
Ash in waste incineration <sup>3</sup>	Ton	67,740.00
Waste oil	Ton	78.53
Total amount of hazardous waste		68,348.41
Total intensity of hazardous waste		0.0012
	Waste oil Waste paint bucket Emulsion Ash in waste incineration <sup>3</sup> Waste oil	Waste oilTonWaste paint bucketTonEmulsionTonAsh in waste incineration3TonWaste oilTonTonTon

### Non-hazardous waste production

Business sector	Key indicator	Unit	2024
	Waste concrete	Ton	2,124,806.78
Engineering contracting	Waste steel	Ton	324,820.24
	Waste bamboo and wood	Ton	153,981.61
	Leftover material	Ton	37,114.78
Featured businesses	Bottom ash from waste incineration	Ton	478,520.00
	Sludge from waste water treatment <sup>4</sup>	Ton	466,740.03
Resources development	Earth-rock stripping	Ton	23,192,689.00
Total amount of non-hazardous waste		Ton	26,778,672.44
Total intensity of non-hazardous waste		Ton per RMB 10,000 revenue	0.4851

<sup>3</sup> In 2024, the scale of domestic waste treatment has expanded, leading to a corresponding increase in fly ash generation compared to the same period last year.

<sup>4</sup> In 2024, due to the impact of localized flooding disasters, the influent water quality at certain water treatment plants has deteriorated, resulting in an increase in the amount of sludge generated during the water treatment process compared to the same period last year.

### Non-hazardous waste recycled

Business sector	Key indicator	Unit	2024
	Waste concrete	Ton	864,255.06
Engineering contracting	Waste steel	Ton	146,131.05
	Waste bamboo and wood	Ton	83,120.55
Featured businesses	Leftover material	Ton	29,203.78
	Bottom ash from waste incineration	Ton	478,520.00

### Non-hazardous waste recycling rate

Business sector	Key indicator	Unit	2024
Engineering contracting	Waste concrete	%	40.67
	Waste steel	%	44.99
	Waste bamboo and wood	%	53.98
Featured businesses	Leftover material	%	78.69
	Bottom ash from waste incineration	%	100.00

#### Other waste

Business sector	Key indicator	Unit	2024
Resources development	Slags (tailings)⁵	Ton	8,886,472.00
	Deep-sea landfill tailings	Ton	2,935,800.00

### **Energy consumption**

Key indicator		Unit	2024
	Heavy oil	MWh	1,576,876.98
	Gasoline	MWh	2,300,684.44
Direct on every	Diesel	MWh	4,273,479.21
Direct energy	Natural gas	MWh	266,967.81
	Total consumption	MWh	8,418,008.43
	Total intensity	MWh per RMB 10,000 revenue	0.1525
	Electricity	MWh	6,549,128.44
to disease on the	Heating power	MWh	201,105.10
Indirect energy	Total consumption	MWh	6,750,233.55
	Total intensity	MWh per RMB 10,000 revenue	0.1223

### **Resources consumption**

Business sector	Key indicator	Unit	2024
	Concrete	Ton	143,317,497.43
En sin e erin si es atrastia s	Building blocks	m <sup>3</sup>	23,324,740.08
Engineering contracting	Steel	Ton	18,225,284.81
	Timber formwork	m <sup>3</sup>	8,921,151.45
	Steel	Ton	879,136.59
Featured businesses	Flocculant	Ton	9,943.05
	Antalkali	Ton	33,951.35

<sup>5</sup> In 2024, the official commencement of production at several overseas projects has led to an increase in tailings generation compared to the same period last year.

### Water management

Key indicator	Unit	2024
Freshwater	m <sup>3</sup>	85,598,808.00
Recycled water	m <sup>3</sup>	228,888,442.08
Emissions of COD	Ton	0
Emissions of ammonia nitrogen	Ton	0
Fresh water consumption intensity	m <sup>3</sup> per RMB 10,000 revenue	1.5506

# Key Social Indicators

### Technological innovation

Key indicator	Unit	2024
Number of national-level science and technology R&D platform	/	28
Number of accumulative valid patents	/	55,393
Number of Metallurgical Science and Technology Awards	/	21

### Employment

Key indicator		Unit	2024
Number of on-the-job employees		person	97,489
Number of on-the-job employees by	Male	person	78,182
gender	Female	person	19,307
Number of on-the-job employees by	Full-time	person	97,489
employment type	Part-time	person	0
	Under 35	person	39,349
	At the age of 36-40	person	17,860
Number of on-the-job employees by age	At the age of 41-45	person	14,269
	At the age of 46-50	person	9,823
	At the age of 51 or above	person	16,188

Key indicator		Unit	2024
	Master's or higher degree	person	16,351
Number of on-thejob employees by educational background	Bachelor's degree	person	56,932
	Junior college education	person	11,950
	High school, secondary school or vocational school education	person	8,207
	Junior high school education or below	person	4,049
Number of on-the-job employees by	China (including Hong Kong, Macao and Taiwan)	person	86,023
region	Overseas	person	11,466

Key indicator		Unit	2024
Total employee turnover		person	3,211
Employee turnover rate by	Male	%	3.52
gender	Female	%	2.36
	Under 35	%	6.12
	At the age of 36-40	%	2.03
Employee turnover rate by age	At the age of 41-45	%	1.60
0	At the age of 46-50	%	0.94
	At the age of 51 or above	%	0.75
Total employee turnover   Male     Employee turnover rate by gender   Female     Under 35   At the age of 36-40     Employee turnover rate by age   At the age of 41-45     Employee turnover rate by age   At the age of 41-650     Employee turnover rate by region   China (including Hong Kong, Macao and Taiwang Kong, Macao ang Kong, Macao a	%	3.71	
region	Overseas	%	0.19
Labor contracting rate		%	100

### Health and safety

Key indicator	Unit	2024	2023	2022
Number of work-related fatalities	person	0	0	0
Rate of work-related fatalities	%	0	0	0

Key indicator	Unit	2024
Coverage of occupational health file	%	100
Lost days due to work-related fatalities	Day	0
Number of projects that have been inspected on safety	/	3,921
Number of subsidiaries that have been inspected on safety	/	29
Number of articles about work safety published in magazines	/	201
Number of new occupational patients	person	0
Number of improved emergency rescue plan	/	10,369
Investments in emergency rescue	RMB 10,000	8,437
Number of emergency rescue drills conducted	/	11,384
Number of person-times in emergency rescue	person-times	291,707
Safe, civilized and standardized construction sites	/	475

### **Development and training**

Key indicator	Unit	2024	
Number of employees trained		person	93,328
	Male	%	79.59
The percentage of trained employees by gender	Female	%	20.41
	Management personnel	%	40.26
The percentage of trained employees by employee category	Professional and technical personnel	%	50.55
	Skilled personnel	%	9.19
Number of person-times trained			
Number of person-times trained		person-times	975,213
Number of person-times trained The average training hours completed per employe	ee	person-times hour	975,213 90.47
·	ee Male	•	
The average training hours completed per employ		hour	90.47
The average training hours completed per employ The average training hours completed per	Male	hour hour	90.47 91.44
The average training hours completed per employ The average training hours completed per	Male Female	hour hour hour	90.47 91.44 86.70

### Supply chain management

Key indicator		Unit	2024
Total number of suppliers		/	191,052
Total number of suppliers (d	omestic)	/	190,810
	East China	/	59,691
South China Central China	/	15,169	
	/	30,679	
Number of suppliers by	North China	/	33,979
geographical region	Northwest China	/	8,690
Total number of suppliers   East China     South China   Central China     Number of suppliers by geographical region   North China     North China   Northwest China     Southwest China   Southwest China     Northeast China   Northeast China	/	34,927	
	ntal number of suppliers (domestic) East China South China Central China North China North China Southwest China Southwest China Northeast China Northeast China	/	7,661
	Hong Kong, Macao and Taiwan	/	14
Total number of suppliers (o	verseas)	/	242

### **Product responsibility**

Key indicator	Unit	2024
Customer satisfaction rate	%	89.27
Number of major customer complaints	piece	0
Complaint handling closure rate	%	100

### Anti-corruption

Key indicator Number of corruption lawsuits concluded by MCC or its employed

### Community investment

#### Key indicator

Total amount of external donations

Investment in consumption assistance

	Unit	2024
rees	piece	0

Unit	2024
RMB10,000	541.18
RMB10,000	1,167

# Index of SSE

No.	Indicator	Chapter References	Indicator	Chapte Refere
	Article 21 Aside from disclosing governance related to climate change tackling; strategies;impacts, risks, and opportunities management; indicators; and targets in accordance with Chapter II of these Guidelines, a disclosing entity shall also provide information on its climate response as required by this Section.	Addressing climate change	Article 27 A disclosing entity shall disclose information on GHG emissions reduction practices, including its participation in the various emissions reduction initiatives, emissio reduction targets and measures (e.g., management strategies, funding, development of technologies), and the outcomes.	S
	Article 22 (1) The entity's assessment of how climate change impacts its strategies and business models, as well as how it responds to these impacts.	Addressing climate change	The disclosing entity shall disclose, for each scope level, the amount of GHG emissions directly reduced by such emissions reduction measures as redesigning production	Enviro
	Article 22 (2) Significant uncertainties it has considered when assessing its climate adaptation.	Addressing climate change	procedures, updating equipment, improving manufacturing processes, and switching fuel and convert the data into metric tons of carbon dioxide equivalent. Emissions reductions may be disclosed by each measure used to achieve the reduction.	, Addre clima
	Article 22 (3)The entity's capacity to adjust its strategies and business models over the short, medium, and long term to adapt to climate change.	Addressing climate change	Section 1 Climate ResponseThe disclosing entity shall disclose its registration and trading activities in relation to the national projects for voluntary GHG emissions reduction and the China Certified Emission Reduction (CCER), as well as its registration and trading of any other emissions reduction	
	Article 23 (1) Adjustments made in the company's current and future strategies, business models, and resource allocation to respond to climate risks and opportunities.	Addressing climate change		
	Article 23 (2) Actions taken or planned by the company to update the production processes and equipment to directly or indirectly tackle climate risks and opportunities.	Addressing climate change	initiatives and emissions savings. Article 28 Any disclosing entity that discloses new technologies, products, and services the	
	Article 23 (3) The transition plan created by the company to address climate risks and opportunities and the fundamental assumptions underpinning the plan.	Addressing climate change	contribute to de-carbonization and carbon neutrality and the related R&D progress shall provide an objective and prudent account of the specifics of the technologies or services developed based on the relevant processes and technologies, the R&D investment and	Devel
	Article 23 (4) The resources allocated by the company to execute the transition plan.	Addressing climate change	progress in the relevant businesses, approvals or certifications it has obtained, its mass production capacity, and its existing orders, among other information. The disclosing enti	busin
	Article 23 (5) The progress in executing the company's transition plan.	Addressing climate change	is encouraged to describe the impacts thereof on its current period's and future financial positions and operating results, as well as the possible uncertainties and risks.	
ion 1 nate ponse	<ul><li>Article 24 A disclosing entity shall calculate and disclose its total GHG emissions in the reporting period, and convert different GHG emissions into metric tons of carbon dioxide equivalent. The disclosing entity is encouraged to disclose Scope 1 and Scope 2 emissions and, if able, Scope 3 emissions.</li><li>Any disclosing entity that uses carbon credits shall disclose the source and amount of the</li></ul>	Кеу	Article 30 (1) Information on pollutant discharge, including but not limited to the types, names, total discharge, certified total discharge, over-discharge, and environmental performance grade (if any) of or in relation to the key pollutants, characteristic pollutants, and the controlled substances specified by international environmental conventions. Disclosing entities are encouraged to present details on its pollutant discharge by category the dimensions of business units or facilities, type of source, and type of activity.	Key Perfor Indica
	carbon credits it uses. Any disclosing entity that participates in carbon emissions trading shall disclose whether it has completed settlement and whether it has been ordered to take corrective actions or is formally investigated by a government agency within the reporting period.	Performance Indicators	Article 30 (2) The technologies and methods employed to treat pollutants, as well as the building, operation, and results achieved by pollution control facilities (e.g., reduction in t concentration/intensity or total amount of discharge).	e Enviro proteo
	The Exchange encourages those disclosing entities that are able to engage a third party to audit or provide assurance on the GHG emissions data and other relevant figures.		Article 30 (3) The targets set for the amount of discharge reduction of the key pollutants ar tion 2 the specific actions taken to achieve these targets.	d Enviro proteo
	Article 25 (1) The company shall provide GHG emissions details at each scope level by operational unit or facility.	Key Performance	Article 30 (4) The impact of pollutant discharge on such groups as its employees and local communities.	Enviro proteo
	Article 25 (2) The company shall provide GHG emissions details at each scope level by country or region.	Indicators Key Performance Indicators	Article 30 (5) Any major administrative penalties received by and any criminal liabilities charged against it in the reporting period for pollutant discharge, and whether there exist significant flaws in the company's environmental monitoring schemes and risk managem practices.	Enviro nt proteo
	Article 25 (3) The company shall provide GHG emissions details at each scope level by type of source (e.g., combustion, processing, electricity, heating, cooling, and steam).	Key Performance Indicators	Article 31 (1) The total amounts (in metric tons) and density (e.g., per unit of revenue, unit output, or facility) of hazardous wastes and non-hazardous wastes produced.	f Key Perfor Indica
	Article 26 A disclosing entity shall disclose the standards, methods, assumptions, or calculation tools used for GHG emissions accounting and state how emissions data are	Key	Article 31 (2) The treatment methods and disposal of hazardous and non-hazardous waste	Enviro prote
	consolidated (such as by equity share proportion or financial and operating control). If there is a change to the accounting standards, methods, or assumptions in the reporting period, the disclosing entity shall state the reasons and specific impacts of these changes.		Article 31 (3) The targets set for the amount of discharge of the wastes and the specific actions taken to achieve these targets.	Enviro prote

lo.	Indicator	Chapter References	No.	Indicator	Cha Ref
Section 2 Pollution Control and Ecosystem Protection Section 3 Resource Utilization and Circular Economy	Article 32 (1) The discontinuation of any production and operational activities and relevant facilities that were in the ecological red zones.	Environmental protection	Section 3 Resource	Article 37 (3) The specific progress and achievements in attaining circular economy objectives in the reporting period, such as the recycling and comprehensive utilization of	Env
	Article 32 (2) Efforts and achievements in the protection and restoration of the areas around the production and operational sites, key land and marine ecological functional areas, ecological red zones, nature reserves, and other regions with critical ecological functions or ecologically fragile regions.Environme protection		Utilization and Circular Economy	wastes (including the amount of waste recycled), the consumption of renewable resources, and the proportion of renewable resources in the total amount of resources consumed. Article 39 A disclosing entity shall disclose its contributions to rural revitalization in the	prot
	Article 32 (3) Efforts and achievements in the protection of wild plants and wildlife and protection and restoration of natural habitats.	Environmental protection		reporting period, including but not limited to: (1) If a high proportion of the disclosing entity's businesses is in the rural and poverty	Making More so
	Article 32 (4) Efforts and achievements in the protection, sustainable use, obtainment and benefit-sharing, monitoring and early warning, and risk management of biological genetic resources.	Environmental protection		alleviation areas, it shall, in the context of its business activities, disclose in detail how its support for rural revitalization and for current progress on poverty alleviation is integrated into its corporate strategies.	
	Article 32 (5) Efforts and achievements in reducing its products' ecological footprint and reliance on the ecosystem, biological species and their habitats, and biological genetic resources over their life cycles.	Environmental protection	Revitalization and Social	Article 39 (2) The specific actions taken to support the specialty industries and local employment in rural areas in the context of its business activities in the rural and poverty alleviation areas, as well as other specific actions taken to support rural revitalization.	Makir More contr
	Article 33 (1) Risk assessments for environmental incidents, management protocols to prevent the related risks, and the overview of contingency plans for environmental	Environmental protection	Contributions	Article 39 (3) The specific achievements, such as the total investment made and the scope and number of beneficiaries in the reporting period, and the impact on the company's brand and businesses.	Makin More contri
	emergencies. Article 33 (2) The dates, locations, and duration of the major environmental emergencies in the reporting period; the classification of these incidents, the responses, and the outcome of these responses; their impacts on the company and the public; and its corrective actions.	Environmental protection		Article 40 A disclosing entity shall provide an overview of its contributions to the public and society in the reporting period, including but not limited to details on any charitable and volunteer activities organised, the amount of funds invested, number of personnel and time allocated, the outcomes, and the impact on its brand and businesses.	Makin Mores contri
	Article 33 (3) Details on any major administrative penalties or criminal charges received from an ecological and environmental authority or other government agencies in the reporting period for an environmental incident, including but not limited to violations, the reasons for	Environmental protection		Article 42 (1) The strategies and objectives for technological innovation and, if investment is involved, the arrangements for fundraising and the safeguards.	Leadir techn innova
	and the amount of the penalties, the impacts on the company's production and operational activities, and its corrective actions.			Article 42 (2) Details on its innovation activities, such as the creation of institutional systems for R&D and innovation management, its involvement in R&D and innovation projects and	Leadir
	Article 35 (1) An overview of energy usage, including but not limited to the total direct and indirect consumption (expressed in metric tons of standard coal) of energy (e.g., coal, electricity, gas, or oil) categorized by type, the energy consumption structure, and the overall	Key Performance Indicators		technology collaboration projects, the amount and percentage of R&D expenditure relative to its operating revenue, the number and proportion of R&D personnel, and the number of invention patents applied in its principal businesses.	
	energy intensity (e.g., expressed as per unit of output). Article 35 (2) Details on the use of clean energy, including but not limited to wind, solar, hydro, geothermal, biomass, and marine energy, as well as the types, total amounts, and proportions of clean energy used such as natural gas.	Key Performance Indicators	Section 2	Article 42 (3) R&D progress and achievements, professional qualifications, and significant awards received, including the number of invention patent applications filed and granted and the number of valid patents; its certification as a high-tech enterprise; and national science and technology awards received in the reporting period.	Key Perfori Indicat
	Article 35 (3) Energy saving goals and the specific actions taken, including but not limited to purchasing energy-efficient production, lighting, and temperature control equipment and	Environmental protection	Innovation- Driven Development and Ethics of	Article 42 (4) Any achievements in innovation and of their application in promoting the new quality productive forces and the impact on the broader economy, society, environment, and stakeholders.	Leadir techno innova
	implementing residual heat and pressure recovery and tiered energy use, and any specific challenges encountered in the use of energy.	Addressing climate change	Science and Technology	Article 43 (1) The fields of the company's scientific and technological activities such as research and development, and the ethical standards in science and technology it adheres	Leadir techno
	Article 36 (1) An overview of the usage of water resources, including but not limited to total water consumption (expressed in metric tons) and usage intensity (e.g., per unit of output).	Key Performance Indicators		to. Article 43 (2) Rules within the company's internal management systems that concern the ethics of science and technology and the company's observance thereof, the establishment	innova Not ap
	Article 36 (2) Water conservation goals and the specific actions taken, and any specific challenges encountered in the recycling and the use of water resources.	Key Performance Indicators		of any ethics (review) committee for science and technology programs and its operations. Article 43 (3) Any instances of a violation of the ethics of science and technology, including	
	Article 37 (1) The specific goals and plans established to achieve a circular economy.	Environmental		an overview of such violations, the penalties imposed by competent authorities, the internal investigation and accountability processes conducted, and the corrective actions taken (if any).	Not ap
	Article 37 (2) The specific actions taken in the reporting period toward achieving a circular economy, including reducing the use of resources, improving resource efficiency, using renewable resources, and preventing and reducing waste creation and recycling wastes.	Environmental protection		Article 43 (4) The internal and external training on ethics in science and technology and efforts to raise public awareness on the related topics.	Not ap

0.	Indicator	Chapter References	No.	Indicator	Chapter Reference
Section 3 Suppliers and Clients	Article 45 (1) An overview of its supply chain risk management program, including but not limited to its objectives and specific plans for supply chain risk management, risk response mechanisms, actions taken, and their outcomes.	Quality and safety assurance		Article 50 (1) Employment and compensation policies and how they are implemented, information including but not limited to job creation and flexible employment in the reporting period, a breakdown of the gender and age distribution of employees at the end o the period, as well as information on payment of salary and social security, labor disputes,	
	Article 45 (2) Actions, such as mergers, acquisitions, or reorganization and technological innovations, and the positive outcomes related to maintaining supply chain security and increasing the company's competitive edge in supply chain management.	Quality and safety assurance		employee turnover, protection of the rights of flexible employees and the compliance, fairness, and transparency of the recruitment and hiring procedures.	talent gr
	Article 46 If the balance of accounts payable (including notes payable) exceeds RMB30,000,000,000 or represents more than 50 percent of the total assets at the end of the reporting period, the disclosing entity shall disclose the amount of overdue accounts payable as of the end of the reporting period and the solutions it plans to implement.		Section 4 Employees	Article 50 (2) Basic information on occupational health and safety, including but not limited to the identification and assessment of occupational safety risks and their sources, the establishment and implementation of the occupational health and safety management systems, the obtainment of certain certifications, related training, the investment in and coverage of work-related injury insurance and workplace safety liability insurance, and the details of any action of the accurate in the reporting period.	Promoti talent gr
	If a disclosing entity or one of its subsidiaries publicly indicates through the National Enterprise Credit Information Publicity System that it owes an overdue payment to a small and medium-sized enterprise ("SME"), it shall disclose the amount of the overdue payment, the payment term for SME suppliers, the reasons behind the overdue payment, whether the overdue payment has led to litigation or arbitration, and the solutions.	Quality and safety assurance		details of any safety accidents that occurred in the reporting period.Article 50 (3) General information on employee career development and training, including but not limited to the disclosing entity's position structure, the mechanisms for employee promotion, selection, and career development, the type, frequency, and implementation of employee training, as well as the annual expenditure on training and the training coverage rate.	Promoti talent g
	The Exchange encourages other disclosing entities to make disclosures in line with the provisions of the preceding two paragraphs.			Article 52 The Exchange encourages each disclosing entity to, in line with its realities, disclosinformation on the due diligence it has conducted during the reporting period in relation to identifying and responding to the negative sustainability-related impacts or risks, including	Strengthe
	Article 47 (1) The establishment, execution, and specific measures of the product and service quality management systems and policies.	Quality and safety assurance	Section 1 Sustainability-	but not limited to the organization or personnel carrying out the due diligence, the scope of due diligence, the procedures for identifying such negative impacts or risks, and the details on its response to the relevant negative impacts and risks.	
	Article 47 (2) Quality management-related certifications received by the company and the certification status of its quality management systems for the major products and services.	Quality Related   Quality Governance   and safety Mechanism   assurance Mechanism		Article 53 (1) The establishment and execution of its stakeholder engagement rules.	lssue du importa assessm
	Article 47 (3) Any significant safety or quality liability incidents in the reporting period relating to its products and services, including the nature of such incidents (e.g., administrative penalties), their impact and the amount of damages, and the actions taken in response and	Quality and safety		Article 53 (2) The channels for receiving and responding to stakeholder comments and suggestions and how they are implemented, e.g., the method, frequency, and content of the relevant communications.	lssue du importa assessn
	the progress on those actions (if any). Article 47 (4) The establishment and implementation of after-sales service and product recall	assurance		Article 55 (1) The establishment and operation of the anti-commercial bribery and anti- corruption risk management system, and whether a whistle-blower protection policy has been established.	Uphold busines
	policies, the channels for receiving customer complaints, and the process and outcome of complaint handling.	Not applicable		Article 55 (2) An assessment of the commercial bribery and corruption risks.	Uphold busines
	Article 48 (1) The development, functioning, and specific measures of its data security	Information security and privacy		Article 55 (3) The total count and percentage of board members, management-level staff and other employees who received anti-commercial bribery and anti-corruption training.	Uphold busines
	management system and certifications (if any)	protection	Section 2 Commercial	Article 55 (4) Details about all commercial bribery and corruption incidents that occurred in the reporting period, including the specifics of the resulting dismissals or disciplinary actions against any board members, management level staff and employees investigations.	liphold
	Article 48 (3) The development and functioning of its customer privacy protection system.	security and privacy protection		actions against any board members, management-level staff and employees, investigations by competent authorities, termination or non-renewal of contracts with business partners, and any lawsuits against the disclosing entity, its board members, management-level staff or employees (if any).	Upholdi busines
	Article 48 (4) Details on any privacy breach incident that occurred in the reporting period, including its impact, the monetary amount involved, and the actions taken in response and the progress on those actions.	Information security and privacy		Article 56 (1) The establishment, operation, and specific measures of the management system to prevent unfair competition (e.g., untrue publicity, implementing monopoly behaviors, and infringing on commercial secrets).	Upholdi busines
		protection		Article 56 (2) If any litigation or significant administrative penalties arise from the disclosing entity's anti-competitive practices in the reporting period, it shall disclose the specifics about the litigation, the amount involved, the administrative penalties imposed, and its corrective actions.	Upholdi business



## HKEX - Environmental, Social and Governance Reporting Guide Index

### Environmental

General Disclosure	& KPI	Indicator Description	Chapter References		
Aspect A1: Emissions					
General Disclosure		Information on:(a) the policies; and(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Environmental protection		
	A1.1	The types of emissions and respective emissions data.	Environmental protection		
	A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental protection		
I/DI	A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental protection		
KPI	A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Environmental protection		
	A1.5	Description of emission target(s) set and steps taken to achieve them.	Environmental protection		
	A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Environmental protection		
Aspect A2: Use of Re	sources				
General Disclosure		Policies on the efficient use of resources, including energy, water and other raw materials.	Environmental protection		
	A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Key Performance Indicators		
	A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Key Performance Indicators		
KPI	A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Environmental protection		
	A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Environmental protection		
	A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Not applicable		

General Disclosure & KPI		Indicator Description	Chapter References	
Aspect A3: The Environment and Natural Resources				
General Disclosure		Policies on minimising the issuer's significant impacts on the environment and natural resources.	Environmental protection Develop green business	
KPI A3.1		Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Environmental protection Develop green business	
Aspect A4: Climate Change				
General Disclosure		Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Addressing climate change	
KPI	A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Addressing climate change	

#### Social

General Disclosure & KPI		Indicator Description	Chapter References	
Aspect B1: Employment				
General Disclosure		Information on:(a) the policies; and(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Promoting talent growth	
	B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	Key Performance Indicators	
KPI	B1.2	Employee turnover rate by gender, age group and geographical region.	Key Performance Indicators	
Aspect B2: Health and Safety				
General Disclosure		Information on:(a) the policies; and(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Promoting talent growth	

General Disclosure & KPI		Indicator Description	Chapter References
	B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Key Performance Indicators
KPI	B2.2	Lost days due to work injury.	Key Performance Indicators
	B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Promoting talent growth
Aspect B3: De	evelopment and	d Training	
General Disclosure		Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Promoting talent growth
	B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Key Performance Indicators
KPI	B3.2	The average training hours completed per employee by gender and employee category.	Key Performance Indicators
Aspect B4: La	bour Standard	s	
General Disclosure		Information on:(a) the policies; and(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Promoting talent growth
KPI	B4.1	Description of measures to review employment practices to avoid child and forced labour.	Promoting talent growth
	B4.2	Description of steps taken to eliminate such practices when discovered.	Promoting talent growth
Aspect B5: Su	ipply Chain Mai	nagement	
General Disclosure		Policies on managing environmental and social risks of the supply chain.	Quality and safety assurance
	B5.1	Number of suppliers by geographical region.	Key Performance Indicators
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Quality and safety assurance
KPI	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Quality and safety assurance
	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Quality and safety assurance
Aspect B6: Pr	oduct Respons	ibility	
General Disclosure		Information on:(a) the policies; and(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Quality and safety assurance

B6.2   Number of products and service related complaints received and how they are dealt with.   Quality assure     KPI   B6.3   Description of practices relating to observing and protecting intellectual property rights.   Leadi innov     B6.4   Description of quality assurance process and recall procedures.   Quality assurance	ing technological
B6.2   how they are dealt with.   assure     KPI   B6.3   Description of practices relating to observing and protecting intellectual property rights.   Leadi innov     B6.4   Description of quality assurance process and recall procedures.   Quality assurance	ance ing technological vation
B6.3 intellectual property rights. innov   B6.4 Description of quality assurance process and recall procedures. Quality assurance process and recall procedures.	vation
B6.4 Description of quality assurance process and recall procedures. assura	ty and safety
	mation security and cy protection
Aspect B7: Anti-corruption	
Information on:(a) the policies; and(b) compliance with relevantGeneral Disclosurelaws and regulations that have a significant impact on the issuerUphorelating to bribery, extortion, fraud and money laundering.	olding business ethic
Number of concluded legal cases regarding corrupt practicesB7.1brought against the issuer or its employees during the reportingKey Pperiod and the outcomes of the cases.	Performance Indicato
KPIDescription of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.Upho	olding business ethic
B7.3 Description of anti-corruption training provided to directors and staff. Key P	Performance Indicato
Aspect B8: Community Investment	
	ng More social ibutions
	ng More social ibutions
	Performance Indicato

# **Feedback Form**

Dear readers:

Thank you for reading this report.

This is MCC's 16th Social Responsibility and ESG Report. To continuously improve our corporate social responsibility information disclosure, better communicate with stakeholders, and more effectively promote social responsibility management and practice, we sincerely look forward to your feedback.

1.What is your overall evaluation of MCC's performance on social responsibility?					
Very good	🗆 Good	🗆 Fair	Poor		
2.What is your overall evaluation on this report?					
Very good	🗆 Good	🗆 Fair	Poor		
3.What do you think of MCC's performance on stakeholder communication?					
Very good	🗆 Good	🗆 Fair	Poor		
4.How do you think MCC is fulfilling its corporate responsibility?					
Very good	🗆 Good	🗆 Fair	Poor		
5.Do you think the content arrangement and layout design of this report are easy to read?					
Very good	🗆 Good	🗆 Fair	Poor		
6. What are your comments and suggestions for MCC to fulfill its social responsibility and this report?					