# 重慶鋼鐵股份有限公司 Chongqing Iron & Steel Company Limited

(H Share Stock Code: 1053) (A Share Stock Code: 601005)

# **2023** ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

# 2023 Environmental, Social and Governance Report

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### **ABOUT THE REPORT**

#### Solemn Commitment

The information and data disclosed in the Report are derived from the Company's statistical reports and official documents and have been audited by relevant departments. The Company guarantees that there are no false records or misleading statements contained in the Report and is responsible for the truthfulness, accuracy and completeness of the contents.

#### **Basis of Preparation**

This Report is mainly based on the *Environmental, Social and Governance Reporting Guide* and Related Listing Rules of Hong Kong Ltd.,, the *Notice on Strengthening the Social Responsibility Commitment of Listed Companies cum Issuing the Guidelines on Environmental Information Disclosure for Listed Companies on the Shanghai Stock Exchange* of the Shanghai Stock Exchange, the *Guidance on Better Fulfilment of Social Responsibility* by State-owned Enterprises of the State-owned Assets Supervision and Administration Commission of the State Council, the *Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR5.0)* of the Chinese Academy of Social Sciences and the *Social Responsibility Work Management System* by China Baowu Group as well as the social responsibility ESG indicator system and other rules.

#### Scope of the Report

Unless otherwise specified, the Report mainly describes the environmental, social and governance performance of Chongqing Iron & Steel and its subsidiaries in terms of their practices in social responsibility fulfilment and performance during the period from 1 January 2023 to 31 December 2023. The currencies involved in the Report shall be in CNY unless otherwise stated.

#### Name Description

"China Baowu" "Baowu Group" used in the Report is the shorted form of China Baowu Steel Group Corporation Limited. "Zhongnan Iron and Steel" used in the Report is the shorted form of "Zhongnan Iron and Steel Co., Ltd. of Baowu Group". "Chongqing Iron & Steel", "Company", and "We" are the shorted form of "Chongqing Iron & Steel Company Limited".

#### **Preparation Process**

Investigation of the concerns of stakeholders – Report planning – Report framework construction – Report preparation training – Collection of materials – Report preparation – Internal discussion – Report design – Solicitation of opinions – Report revision – Management review – Board of Directors review – Release of the final draft.

#### Text Language

The Report is available in simplified Chinese, traditional Chinese, and English. If there is any discrepancy between the three versions, the simplified Chinese version shall prevail.

#### Form of Release

The Report will be published in printed version and PDF electronic version. The PDF electronic version can be downloaded and read on the Company's official websites and the Shanghai Stock Exchange. To reduce the impact of printing on the environment, we encourage readers to download the electronic version whenever possible.

The Report is printed on recycling paper. To save paper, we will limit the length to the greatest extent. For more information, please visit the official website, WeChat official account or the annual financial report of the Company

### **MESSAGE FROM THE CHAIRMAN**

2023 marks the opening year for comprehensively implementing the spirit of the 20th National Congress of the Communist Party of China. It is also the starting year for deep promotion of the transformation of educational achievements on the theme of studying and implementing Xi Jinping's Thought of Socialism with Chinese Characteristics for a new era. It is also the key year for the Company to transform from quantitative changes to qualitative changes in terms of high-quality development. In 2023, all employees worked together and fulfilled their duties, focused on safety and environmental protection, deepened reform and innovation, fully tapped production potential and reduced costs, thus comprehensively improving the Company's quality and efficiency. Besides, we actively responded to the challenges of the downward shock cycle of the steel industry and achieved historical highs in terms of many technical and economic indicators as well as made huge progress in green and low-carbon governance.

We promoted accounting operations based on the "Four Qualifications" and achieved new breakthroughs in manufacturing capabilities. We adhered to the principle of high efficiency, tracked the changes in efficiency in real time, flexibly adjusted production plans, and achieved breakthroughs in various technical and economic indicators. In the first quarter of 2023, the #4 blast furnace was awarded second place of Baowu Group's "Ultimate Energy Efficiency Blast Furnace" and the title of 2000 cubic-level "Low Carbon Champion Blast Furnace"; the steelmaking process was awarded the title of "Efficiency Improvement Champion Factory"; the hot charge ratio of the hot rolling production line increased from 75.19% in 2022 to 81.77% in 2023, ranking first in Baowu Group.

#### We further promoted green and low-carbon transformation and achieved more green development.

We implemented the "6C" carbon emission reduction and actively created energy efficiency benchmarks for key processes. The annual energy consumption of the 5-6# coke oven process and the energy consumption of the converter process in December reached the benchmark level; the annual self-generated power generation reached 3,955 million kWh, and the self-generated power generation rate reached 84.89%, both record highs; we became the first steel company in Southwest China to announce ultra-low emission clean transportation. Meanwhile, we successfully became a national advanced unit for metallurgical greening and were awarded honorary titles such as the benchmark enterprise for green steel development.

We vigorously promoted technological innovation and built a solid engine for the Company's highquality development. Under the guidance of the scientific and technological innovation plan, we kept increasing investment in research and development, constantly improved systems and mechanisms, and stimulated innovation vitality. We have increased our number of national innovation platforms to three, created one provincial R&D platform, "Key Laboratory of Steel Purification and Inclusion Control", participated in one national key R&D plan, and passed the "High-tech Enterprise" certification and national enterprise technology centre re-evaluation. In addition, we won 1 third prize of Chongqing Technology Invention Award, participated in the formulation of four national standards, and applied for 439 invention patents. The Company's independent innovation capability has been significantly improved, and the motivation for high-quality development has become more and more abundant.

We accelerated the advancement of smart manufacturing projects and further solidified the foundation for digital and smart heavy steel construction. Guided by Baowu Group's "4321" smart manufacturing project, we launched the smart centre to break down data barriers between processes and support data utilisation and sharing. We increased the four indexes to 65.93%; completed the optimisation of the operation management and control platform, and built the CE Plus system to support the Company's accounting operations, and raised the data platform index to 91%; we carried out actual network security attack and defence drills to improve early warning and processing capabilities, and achieved the Company's double-zero goal of network security as well as won the title of Chongqing Industrial Internet New Model Integrated Innovation Application.

We adhered to the principles of people-oriented, sincere care and giving back to society, and built a responsible steel company. We adhered to the people-oriented approach and carried out diversified talent cultivation and training. We promoted the three major talent programmes, cultivated 368 mature core talents, and further enhanced the competitiveness of the employee team. We focused on employees' desire for a better life. Based on the principles of expanding coverage, improving accuracy, and enhancing effectiveness, we built an "inclusive + accurate" employee care system and organised 67 "Do practical things for employees" projects; we held cultural and sports activities that employees enjoy every month, which further enhanced employees' sense of gain, happiness and security. We carried out public welfare activities, served the rural revitalisation strategy, integrated into the local regional development, and built a harmonious social environment.

Knowing our deficits and forging ahead, looking at the distant mountains and keeping advancing. 2024 marks the 75th anniversary of the founding of the People's Republic of China and is a critical year for achieving the goals and tasks of the "14th Five-Year Plan". We adhere to the guidance of Xi Jinping's Thought of Socialism with Chinese Characteristics for a New Era and fully implement the spirit of the 20th National Congress of the Communist Party of China. We abide by the working policy of "focusing on the central government, serving the people, safeguarding the big picture, and promoting development", and follow the "pragmatic, effective and standardised" work requirements, inherit the long-lasting spirit of serving the country, the spirit of responsibility, the spirit of Hongyan, the spirit of innovation, the spirit of struggle, and the spirit of dedication, deepen and solidify the path of green, low-carbon, high-quality development, and build the Company into an "eco-friendly" steel manufacturer "surrounded by lush mountains and lush waters"!



Secretary of the Party Committee and Chairman of Chongqing Iron & Steel Company Limited Xie Zhixiong

### **ABOUT CHONGQING IRON & STEEL**

#### (I) Company Profile

Founded in August 1997, Chongqing Iron & Steel issued H shares (stock code: 1053) on the Stock Exchange of Hong Kong (HKEX) in the same year, and A shares (stock code: 601005) on the Shanghai Stock Exchange in 2007.

The predecessor of Chongqing Iron & Steel is Hanyang Iron Works founded by Zhang Zhidong, Viceroy of Hu-Guang, in 1890. In March 1938, Hanyang Iron Works moved west to Chongqing, and was completed and put into operation in March 1940. In January 2007, Chongqing Iron & Steel started its move for energy conservation and environmental reasons and moved from Dadukou District to Changshou District of Chongqing. At the end of 2017, Chongqing Iron & Steel completed judicial reorganisation, and in December 2020, China Baowu became the actual controller of the Company. Integrating into China Baowu, Chongqing Iron & Steel is resolutely striving towards the goal of "building itself into a high quality green and intelligent manufacturing steel enterprise with a production capacity of 10 million tons" with a new outlook, and is committed to growing into a leader in the steel industry in southwest China and making new brilliant achievements in the new era.



In 2023, the Company produced 6,516,000 tons of iron, 7,115,500 tons of steel, and 10,222,200 tons of commercial billets, with an annual operating income of RMB39,318 million and a total profit of RMB-1,744 million.

The Company's main production lines include 4,100 mm wide and heavy plate production lines, 2,700 mm medium plate production lines, 1,780 mm hot rolled sheet production lines, high speed wire rods and bar materials. The Company has diversified production lines and complete products, including medium plates, heavy plates, hot rolled products, long products and other varieties. The products are widely used in railways, airports, bridges, tunnels, ships, urban high-rise buildings and other fields. The Company's products are mainly sold in Chongqing and the Southwest region, meeting the market needs of the Southwest region. The products have high visibility and reputation in the regional market. The Company's steel for hull structure, boiler and pressure vessel won the title of "China Famous Brand", and four other products won the title of "Chongging Famous Brand". The Company has been awarded the National May Day Labour Certificate, National Advanced Enterprise for Implementing Excellent Performance Model, Chongging Famous Trademark, Chongging Quality and Efficiency-oriented Enterprise, Chongging Contract Credit and Trustworthy Enterprise and other honorary titles. In 2023, the Company's structural steel hot-rolled wide-thick steel plates for ships and offshore engineering, and structural steel hot-rolled wide-thick steel plates for bridges were recognised as "Golden Cup Quality Products" by the China Iron and Steel Association. We successfully created a national advanced unit for metallurgical greening and were awarded the titles of "Steel Green Development Benchmark Enterprise" and "Chongging Environmental Protection Integrity Enterprise".

#### (II) Organisational Structure



#### (III) Corporate Culture

Culture instils in us confidence. Chongqing Iron & Steel's corporate culture is underpinned by our position and belief. Over the past 100 years, these position and belief have been translated into the mission, vision and value proposition of employees at Chongqing Iron & Steel. These are fused into our work and life, become our collective personality, and evolve into Chongqing Iron & Steel people's commitment to the future vision.

Mission:	Keep the national strength of steel alive and build a green and wonderful life
Vision:	To become a leader in the steel industry in Southwest China
Development	To create a high-quality green intelligent steel manufacturer with an annual
goal:	output exceeding 10 million tons
Core values:	Integrity, innovation, greenness and shared benefits

#### (IV) Big Events in 2023

On 10 January, Chongqing Iron & Steel was awarded the title of "AAA" enterprise for harmonious labour relations in Chongqing.

On 8 February, the *A Semi-automatic Roll Changing Control Method and Device of Chongqing Iron* & *Steel* won the third prize in the enterprise group of the fifth Metallurgical Youth Innovation and Creativity Competition of the Chinese Metal Society.

On 24 April, Chongqing Iron & Steel successfully launched the trial-rolling of  $\Phi$  12mm HRB500E hotrolled ribbed steel bar on double high rods production line, marking a new level of technology for small-sized high-strength earthquake-resistant steel bars.

On 15 June, Chongqing Iron & Steel signed a supply contract for steel plates for pipe supports for Units 5 and 6 of the Lufeng Nuclear Power Plant, officially entering the nuclear power steel market.

On 29 June, the Chongqing Iron & Steel History Exhibition Hall was named the Patriotism Education Base of Changshou District, Chongqing.

On 10 July, Chongqing Iron & Steel's "Finishing Roll Change Efficiency Improvement Control Technology and Application" project won the third prize for the Technology Invention Award in the 2022 Chongqing Science and Technology Award.

On 23 August, Chongqing Iron & Steel exported the first shipment of 20,000 tons of steel coils, which was the first major export order signed by the Company in recent years.

On 19 October, Chongqing Iron & Steel became the first enterprise in Chongqing to complete the transformation, evaluation and monitoring of ultra-low emission clean transportation.

On 30 November, Chongqing Iron & Steel successfully rolled 1.5\*1,260mm ultra-thin products on the hot coil production line, and the steel plate thickness reached 1.5mm for the first time.

On 25 December, the optimisation and upgrading construction project of the Chongqing Iron & Steel Operation Management and Control Smart Platform was fully launched. The Company added a smart energy dynamic management and control system, an intelligent equipment management system (IEQMS), a logistics dynamic management and control system, and a decision support system.

### **INTEGRITY: LAY THE FOUNDATION OF GOVERNANCE**

Honesty and integrity are the foundation for the survival and development of an enterprise. Chongqing Iron & Steel insists on operating in compliance with laws and regulations and with integrity. By improving the governance structure, establishing a solid bottom line of integrity, and strengthening ESG management, we have established a foundation of integrity and laid a solid foundation for development in a responsible attitude towards all stakeholders.

#### (I) Party Building Guidance

The Company resolutely implements Xi Jinping's important expositions on the reform and development of state-owned enterprises and party building, follows the guidance of the two consistent principles to make a stronger, better and bigger enterprise, and always adheres to the unity of party leadership and improvement of corporate governance. In addition, the Company strengthens the party's leadership in improving corporate governance, firmly abides by the principles, and improves quality, efficiency and vitality, and promotes high-quality development of enterprises with high-quality party building.

In 2023, the Company's party committee adhered to the guidance of Xi Jinping's Thought of Socialism with Chinese Characteristics for a New Era, solidly carried out thematic education on studying Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, gave full play to the role of the party committee in "holding the direction, managing the big picture, and ensuring implementation" to promote the deep integration between party building and production operation, which has injected strong spiritual power and provided a strong political guarantee to further improve the comprehensive competitiveness of Chongqing Iron & Steel. The heavy plate hot rolling party branch of the Company's steel rolling plant was awarded the title of "Advanced Grassroots Party Organisation" by the Baowu Party Committee; four party members were awarded the title of "Excellent Communist Party Members of Baowu"; two party workers were awarded the title of "Excellent Party Workers of Baowu" Notice on Issuing the Standardised Configuration Scheme for the Service Centre (Small-sized Enterprises) of Inclusive Finance of China Construction Bank.

#### (II) Corporate Governance

The Company strictly complies with the *Company Law of the People's Republic of China, the Securities Law of the People's Republic of China*, and the Rules Governing the Listing of Securities on the HKEx, and has established a corporate governance structure with a clear division of labour and mutual checks and balances among the General Meeting of Shareholders, the Board of Directors, the Supervisory Committee and the Managers. In 2023, in accordance with the latest regulatory requirements, we revised seven systems, including the *Articles of Association*, the *Rules of Procedure of the Board of Directors, the Independent Director System*, the *Working Regulations of the Audit Committee of the Board of Directors, the Working Regulations of the Nomination Committee of the Board,* and optimised the process mechanism to ensure the Company's standardised and efficient operation.

#### 1. Shareholders' rights

➤ General Meeting of Shareholders

As the Company's authority, the General Meeting of Shareholders reviews and approves major matters such as the Company's operating policies and investment plans, annual financial budgets and final accounts, equity incentive plans, etc. The Company convenes the General Meeting of Shareholders in accordance with relevant laws and regulations, the *Articles of Association, the Rules of Procedure for General Meetings*, and other provisions. The chairman, president and other senior managers of the Company respond to shareholders' inquiries and listen to their opinions and suggestions to ensure that shareholders exercise their rights in accordance with the law and safeguard their legitimate rights and interests. Two sessions of General Meeting of Shareholders were held in 2023, and all resolutions were approved.

> Voting mechanism for small and medium-sized investors

The Company complies with the *Further Enhancing the Protection of the Legitimate Rights and Interests of Small and Medium-sized Investors in the Capital Market* and other relevant laws and regulations, implements the voting mechanism for small and medium-sized investors, and convenes General Meeting of Shareholders using the "onsite + online voting" method; when reviewing major matters affecting the interests of small and medium-sized investors, the votes of small and medium-sized investors are counted separately, and the results of the separate counting is publicly disclosed and submitted to the regulatory agency in a timely manner.

#### 2. Directors and the Board of Directors

> Composition of the Board of Directors

The Company's ninth Board of Directors consists of nine directors, with professional backgrounds in different fields, such as corporate governance, metallurgy, and finance, including three independent directors (two specialising in accounting affairs and one specialising in law affairs). The independent directors submitted an independence confirmation statement to the Company. The Board of Directors evaluated the independent directors in accordance with the "Administrative Measures for Independent Directors of Listed Companies", "No. 1 Document of Self-Regulatory Guidelines for Listed Companies-Standardised Operations" and the Rules Governing the Listing of Securities on the HKEx and it is deemed that the independent directors have the qualifications to serve as independent directors of the Company.

Name	Gender	Position	Executive Director	Non- executive Directors	Independent Non- executive Director
Xie Zhixiong	Male	Chairman	1		
Song De'an	Male	Vice Chairman		1	
Meng Wenwang	Male	Director and President	1		
Lin Changchun	Male	Director		1	
Zou An	Male	Director, Senior Vice President, Chief Financial Officer, Secretary to the Board, General Counsel	1		
Zhou Ping	Male	Director		1	
Sheng Xuejun	Male	Independent Director		1	1
Zhang Jinruo	Male	Independent Director		1	1
Guo Jiebin	Male	Independent Director		1	$\checkmark$

#### Meeting of the Board of Directors

The "*Rules of Procedure of the Board of Directors*" have been formulated to clarify the discussion methods and decision-making procedures of the Board of Directors. During the Reporting Period, the Company's Board of Directors held 11 meetings, reviewed three reports, reviewed and approved 39 resolutions, and no resolution was vetoed. Independent directors issued independent opinions on major matters six times and issued two ex-ante approval opinions. None of the directors was absent or failed to attend the meeting in person for two consecutive times.

Name	Number of Meetings Directors who Shall Attend	Number of Attendance in Person	Number of Remote Attendance	Number of Attendance by Proxy	Number of Absences	Number of Attendance of General Meeting of Shareholders
Xie Zhixiong	11	11	7	0	0	2
Song De'an	11	10	9	1	0	0
Meng Wenwang	11	11	7	0	0	2
Lin Changchun	5	5	4	0	0	0
Zou An	11	11	7	0	0	2
Zhou Ping	11	11	9	0	0	0
Sheng Xuejun	11	11	9	0	0	1
Zhang Jinruo	11	11	9	0	0	0
Guo Jiebin	11	11	9	0	0	0
Lai Xiaomin	3	3	3	0	0	0

#### > Special Committees of the Board of Directors

The Board of Directors has four special committees: Audit Committee, Nomination Committee, Salary and Remuneration Review Committee and Strategic Committee. The number meetings for convened by the four special committees in 2023 is six, two, three, and three, respectively, to provide suggestions or opinions on the Company's financial reporting, internal control effectiveness, remuneration policies for directors and senior managers, etc., and effectively promote the standardised operation and scientific decision-making of the Board of Directors.

Categories of		
Special Committees	Main Duties	Member
Audit Committee	The Audit Committee supervises and evaluates the work of external audit institutions and the Company's internal controls, supervises, manages and evaluates internal audit work, reviews financial reports and expresses opinions, and coordinates communication between management, audit-related departments and external audit institutions.	Zhang Jinruo, Zhou Ping, Sheng Xuejun, and Guo Jiebin
Nomination Committee	The Nomination Committee studies and makes recommendations on the candidates, selection criteria and procedures for the Company's directors, president and other senior managers.	Sheng Xuejun, Song De'an, Zhang Jinruo, and Guo Jiebin
Salary and Remuneration Review Committee	The Salary and Remuneration Review Committee formulates and conducts assessment standards for the Company's executive directors and managers, and is responsible for formulating and reviewing the remuneration policies and plans for the Company's directors and managers.	Guo Jiebin, Song De'an, Sheng Xuejun, and Zhang Jinruo
Strategic Committee	The Strategic Committee is responsible for researching and making recommendations on the Company's long-term development strategies and major investment decisions.	Xie Zhixiong, Song De'an, Meng Wenwang, Lin Changchun, Zou An, and Zhou Ping

#### > Responsibilities of the Board of Directors and Senior Management

The Board of Directors, under the leadership of the Chairman, is collectively responsible for the management and operation of the Company. The Board of Directors formulates the Company's overall strategy, sets the Company's business direction and financial performance goals, and ensures that the Company establishes and implements good corporate governance frameworks and procedures. The Senior Management is responsible for the Company's production and operations and implementing the policies formulated by the Board of Directors. The Company's Chairman and President are held by different individuals, with a clear division of responsibilities; the Chairman is Mr. Xie Zhixiong, who is responsible for formulating the Company's medium- and longterm development strategies and development goals, and presides over the daily work of the Board of Directors; the President is Mr. Meng Wenwang, who is responsible for production and operation management.

#### 3. Supervisory Committee

In 2023, the Company's Supervisory Committee convened in accordance with laws and regulations to perform statutory supervisory duties. The Board of Supervisors held six conventions. The Board of Supervisors reviewed and approved 16 major matters, such as regular reports, appointment of accounting firms, and amendments to the articles of association. Supervisors actively expressed their opinions, effectively played their supervisory role, and safeguarded the legitimate rights and interests of the Company and shareholders.

#### 4. Duty performance training for directors, supervisors and senior management

The Company's directors, supervisors and senior managers participate in training on securities laws, regulations and exchange rules organised by regulatory agencies and professional institutions, as well as training on integrity and business ethics, to continuously enhance their self-discipline awareness and ability to perform their duties. In 2023, 38 individuals of the Company's directors, supervisors and senior management participated in initial and follow-up training and special training, covering the independent director system, rule of law construction, and information disclosure.

#### 5. Information disclosure and investor relations

The Company has formulated an "Information Disclosure Management System", which stipulates management responsibilities, matters that need to be disclosed and processes, and carries out information disclosure in a true, accurate, complete, timely and fair manner. In 2023, the Company disclosed a total of 155 announcement documents focusing on matters closely related to production and operations, such as regular reports, related transactions, and amendments to the articles of association. In August 2023, after a comprehensive evaluation by the Shanghai Stock Exchange, the Company's 2022–2023 information disclosure evaluation maintained the B-level level.

Based on the diversified investor relations management through communication platforms such as General Meeting of Shareholders, performance briefings, and Shanghai Stock Exchange e-interaction platform, we built a bridge of trust between the Company and investors and improved investors' cognition of the Company. In 2023, the Company invited shareholders and media to attend the General Meeting of Shareholders, where they communicated with the Company's directors, supervisors and senior management; organised three performance briefings; handled a total of 56 phone call inquiries from investors, responded to 45 inquiries from investors through the interactive platform, and responded to 22 investor consultation IR emails, participated in 4 on-site investor exchange activities organised by Baowu, Chongqing Securities Regulatory Bureau, and securities companies; invited the securities company Huatai Securities to visit, and signed a party building and co-building agreement to establish a long-term communication mechanism.



Convened the 2022 Annual General Meeting of Shareholders



Conducted an online performance briefing

#### (III) ESG Management

#### **ESG Statement of the Board of Directors**

Chongqing Iron & Steel recognises the importance of ESG issues to the Company's risk management and sustainable development. The Board of Directors is the highest leadership body for the Company's ESG efforts, and the Strategic Committee of the Board of Directors is responsible for the ESG work of the Company and makes relevant recommendations to the Board of Directors. The Board is committed to ensuring that the Company's ESG efforts comply with legal, regulatory and standard requirements, controlling ESG-related risks, and ensuring that the Company's ESG objectives and implementation processes are effective.

The Board of Directors continues to identify and assess important ESG topics, employs various channels to communicate with key stakeholders, and determines the priority of ESG topics of the Company based on the external economic and social environment and the Company's strategy, to provide references for the Company's ESG information disclosure.

The Board of Directors attaches great importance to achieving important ESG goals such as workplace safety, energy and environmental protection, and has set a number of indicators to review the progress of relevant goals. In 2023, the Company's safety, energy, and environmental protection indicators met the annual goals, laying the foundation for the construction of a high-quality, green and intelligent steel enterprise.

This report discloses in details the progress and effectiveness of the ESG work of Chongqing Iron & Steel for 2023. The Board of Directors and all Directors of Chongqing Iron & Steel warrant that there are not any false statements, misleading statements contained in, or material omissions from this report and accept individual and joint liabilities for the truthfulness, accuracy and completeness of its contents.

#### 1. ESG governance structure

The Company adheres to the concept of green development and builds "Chongqing Iron & Steel Immersed in Green and Charming Landscape" and integrates external ESG supervision requirements into the Company's development strategy and daily production and operations, thus forming a vertically-implemented and horizontally-covered ESG management structure. The Management is responsible for ESG management affairs in the field as per their duties. Each functional business department and production unit implements ESG matters in the field according to their functional responsibilities, and maintains close communication with stakeholders to create an influential and sustainable responsible brand.

The Board	High	est Leadership Organisation for the Company's ESG Work		
The Strategic Committee of the Board of Directors		ponsible for the Company's ESG work and makes relevant mmendations to the Board of Directors, including:		
	1.	Review the Company's ESG policies and strategies to ensure compliance with relevant laws, regulations and standards		
	2. Assess and sort out the Comp opportunities and make recommen Directors			
	3.	Review the Company's ESG management and internal control systems and make recommendations to the Board of Directors on their adequacy and effectiveness		
	4.	Evaluate, review and supervise the goals and implementation of the Company's ESG work, and review the Company's externally disclosed ESG reports		
	5.	Provide guidance on the formulation of the Company's ESG management vision, goals and strategies		

The Board	High	nest Leadership Organisation for the Company's ESG Work
ESG Working Group	The ESG Working Group provides professional support to the Strategic Committee of the Board of Directors, including:	
	1.	Develop specific ESG policies and action plans that are in line with the Company's strategy and development goals
	2.	Manage ESG-related risks in the Company's daily operations
	3.	Communicate with the Company's departments and subsidiaries to coordinate and promote the implementation of ESG matters
	4.	Collect, organise, and compile the Company's public disclosures on ESG matters and performance

#### 2. ESG capacity building

> Responsibility indicator system

During the Reporting Period, the Company improved our indicator system covering governance, environmental and social aspects, and enhanced ESG management and report preparation based on the regulations of regulatory agencies, capital market concerns and the practices of outstanding industrial peers.

> Responsibility performance assessment

According to the division of labour and functional responsibilities of management and department (unit) heads, the Company incorporated ESG indicators such as green index, "three wastes" management, safety production, and product quality into performance assessment to promote the performance and ensure the implementation of key ESG indicators.

#### Responsibility capacity building

The Company strengthened the capacity building, enhanced the awareness of social responsibility, and cultivated a responsible corporate culture. In 2023, the Company actively participated in three professional ESG management training sessions and exchanges organised by the Shanghai Stock Exchange, Baowu, and third-party institutions, with a total of 16 participants and 128 hours of training duration to improve the Company's responsibility performance ability. In June 2023, "Emergency Rescue To Demonstrate the Sense of Social Responsibility upon Fire Accident" was awarded the "Excellent Social Responsibility Case" of Baowu.

#### 3. Communication with stakeholders

The Company values stakeholder communication, improves the stakeholder communication mechanism, identifies the expectations of stakeholders for the Company and responds positively to enhance stakeholders' cognition and trust of the Company.

Stakeholders	Expectations and Demands	Communication and Responses
Government	Observe discipline and law	Integrity and compliance governance
	Pay taxes according to law Support local development	Pay taxes proactively Provide employment opportunities in response to major employment incentive
		policies
Shareholders and investors	Protect shareholders' rights and interests	Improve operating performance
	Improve corporate governance	Enhance information disclosure
	Strengthen risk control	Raise internal control level
Employees	Protect the rights and interests of employees	Improve the level of salary and welfare
	Help employees grow	Pay attention to the physical and mental health of employees
	Balance employees' work and life	Enhance the training and promotion mechanism
	Health and safety	Organize cultural and sports activities
		Strengthen employee communication

#### Stakeholder demands and response of Chongqing Iron & Steel

Stakeholders	Expectations and Demands	Communication and Responses
Customers	Product and service innovation	Attach importance to scientific and technological innovation and management innovation
	Protect the rights and interests of customers	Strengthen product quality and service management
	Improve customer satisfaction	Adhere to business ethics
Partners	Drive industry development	Build jointly the ecosystem
	Partners' win-win results	Adhere to business ethics
	Implement responsible procurement	Build a responsible supply chain
Community	Actively integrate into the community	Carry out public welfare projects
	Carrying out volunteer activities	Build a volunteer service team
	Help people in need	Contribute to rural revitalisation
Environment	Conserve energy and reduce emissions	Advance green manufacturing
	Protect the ecology	Develop new environmental- friendly products
	Make rational use of	Promote resource
	resources	conservation
	Respond to climate change	
	Save water resources	

#### > Identification of major issues

In order to accurately present the Company's ESG performance and work progress, the Company has established a standardised issue identification and evaluation process, constructed a matrix of substantial issues, identified key ESG issues and highlighted them in this report.

- > Identification and evaluation process of substantial issues
  - Identification of issues

Through analysis of macro policies and industry policies, research on authoritative domestic and foreign ESG standards, benchmarking of outstanding industry ESG reports, and study of the Company's strategic priorities, the Company has identified and established a library of the Company's ESG issues. In December 2023, the Company distributed questionnaires to stakeholders and received a total of 230 valid questionnaire responses.

• Evaluation of issues

The ESG working group and functional business departments jointly select material issues that need to be disclosed, and establish a matrix of material issues from the two dimensions of "significance to stakeholders" and "significance to the Company's development".

According to the results of the questionnaire survey, the Company found that stakeholders prioritise issues such as production safety, product quality, employee rights protection, and ESG management. We focused on disclosing such issues to respond to the demands of stakeholders.

• Review and confirmation

The Company's Board of Directors and the Strategic Committee conduct the final review.





No.	Issue	No.	Issue
1	Operating performance and financial performance	24	Treatment of "three wastes"
2	Corporate governance	25	Response to climate change
3	Protection of investors' rights and interests	26	Ecological safety protection
4	Party building	27	Protection of employee rights and interests
5	Information disclosure compliance	28	Occupational health
6	Board of Directors ESG governance	29	Training and occupational development
7	ESG Governance	30	Compensation and benefits system
8	Operation in compliance with laws and regulations	31	Employee care
9	Risk management and internal control	32	Production safety
10	Integrity building and anti-corruption	33	Product quality
11	Business ethics	34	Technology and innovation
12	Information security	35	Intellectual property right management
13	Environmental management system and goals	36	Intelligent manufacturing
14	Environmental warning and emergency mechanism	37	Responsible marketing
15	Environmental impact assessment	38	Customer service and privacy protection
16	Green product research and development	39	Responsible supply chain management
17	Green packaging and transportation	40	Response to national and regional development requirements
18	Environmental protection technology research, development or application	41	Industrial development and mutual benefit
19	Energy management system and goals	42	Strategic cooperation
20	Utilisation of energy resources	43	Coordinated industrial supply chain development
21	Conservation of energy resources	44	Community communication and communion
22	Utilisation of green clean/renewable energy resources	45	Public charity and rural revitalisation
23	Green steel plants and green offices		

#### (IV) Risk Management and Internal Control

In 2023, while complying with the principle of "market-oriented and standardised operation", the Company strengthened the integration of party leadership and improvement of corporate governance capabilities, and built a responsibility system with internal control as the starting point, the Board of Directors and the party committee as the dual responsibility entities, and the core business departments, supporting functional departments and audit supervision departments as the three coordinated lines of defence. In accordance with the "2023 Comprehensive Risk Management Work Plan", the Company gradually refined risk points and management methods, improved risk prevention and resolution in key areas, and consolidated the main responsibilities and supervisory responsibilities of risk management and control. No major risk events occurred in 2023, the risk management system is sound, operates effectively, and overall risks are well controlled.

In 2023, the Company effectively implemented the Basic Standards of Corporate Internal Control and supporting guidelines, and clarified the basic elements of the internal control system, as well as the division of responsibilities and business requirements. Oriented by risk prevention, the Company, in combination with corporate governance structure, industry characteristics, risk appetite and risk tolerance, comprehensively reviewed the scientific design and implementation effectiveness of the existing internal control system, and identified risk points in different business processes as well as converted audit results into management effectiveness in different professional fields. In 2023, based on the organisational structure, division of rights and responsibilities, and adjustments to business processes, the Company revised 138 rules and regulations; built the functional responsibilities and added a total of 33 new rules and regulations; reduced and consolidated the systems that were not applicable to the actual production and operation, and abolished 124 systems; currently, the Company has 687 rules and regulations in effect, and the internal control system is more market-oriented and standardised.

#### (V) Audit Management

The Company complies with the "Audit Law of the People's Republic of China" and other laws, regulations and requirements, and has formulated the "Internal Audit System" and "Internal Audit Project Implementation Control Standards" to clarify the management responsibilities and operating mechanism of internal audit. In 2023, 75 issues were discovered in the internal audit, and were all rectified.

With the approval of the General Meeting of Shareholders, the Company selected Ernst & Young Hua Ming LLP through bidding to be responsible for the Company's 2023 financial audit and internal control audit. Ernst & Young Hua Ming LLP has completed the audit, issued the relevant audit report, and stated its relevant reporting responsibilities in its audit report. The Board of Directors decided that the total remuneration the Company should pay to Ernst & Young Hua Ming LLP was RMB2.88 million (tax included, including subsidiaries). Ernst & Young Hua Ming LLP Tax & Consulting Co., Ltd. charged HKD16,900 (tax excluded) for providing profits tax declaration services for companies in Hong Kong.

#### (VI) Legal Compliance

In 2023, the legal construction and compliance management of the Company were implemented, centred on improving the organisational system, institutional system, and operating mechanism, and the Company solidly promoted the working progress of contract management, litigation case management, compliance management, and bidding management, and kept improving the corporate governance capability according to law.

#### 1. Management system

The Company has revised the Compliance Management Systems, clarified the legal construction and compliance management organisational leadership system consisting of the party committee, Board of Directors, and Senior Management, and formed a "1+N" system. In addition, the Company established and improved eight operating mechanisms, such as compliance review, and created a compliance culture to promote the performance of duties; the general counsel serves as the chief compliance officer and is responsible for the organisational leadership and overall coordination of compliance management; the Company has further improved the management system.

#### 2. Operational mechanism

The Company has established and improved compliance risk identification and warning mechanisms, compliance review mechanisms, compliance risk response and reporting mechanisms, violation rectification mechanisms, violation accountability mechanisms, compliance evaluation mechanisms, and collaborative operation mechanisms, and has established a violation reporting platform.

Compliance risk identification, warning, response and reporting: The functional business departments regularly identify compliance obligations in laws, regulations and other requirements and promote implementation. The Company publishes the "*Applicable List of Laws, Regulations and Other Requirements*" and updates online laws and regulations in real time database to provide reminders and warnings on compliance risks; reports violation penalties and major legal cases every quarter, and requests units where problems occur to complete rectifications and be held accountable in a timely manner.

Compliance evaluation: the Company incorporates violations of laws and regulations into performance appraisals, and regards legal literacy and legal performance as important elements in employee evaluation. The Company evaluates annual compliance management every year and issues a "*Compliance Evaluation Report*."

Compliance review: The Company revises the management system and issued the "*Notice on Strengthening Compliance Management*" and "*Guidelines for Legal Review of Major Matters*" to further clarify the legal compliance review responsibilities and management process. In 2023, the Company reviewed 145 management systems, 1,349 economic contracts, 29 major matters, and 73 other matters, put forward 148 opinions and suggestions, tracked the progress of review opinions, and completed the 100% review goal.

#### 3. Compliance culture

The Company created a legal compliance culture through different forms and organised legal compliance publicity and education sessions. In 2023, the Company conducted and participated in 25 special training sessions on legal compliance, with a total of 5,733 individuals participating in the training sessions, and actively created a corporate trustworthy and legally compliant culture.

- 1. The Company has established a compliance management liaison group to provide timely reminders of updates on laws, regulations and other regulatory requirements to ensure correct application; the Company has published "*Contract Management Briefings*", "*Legal Work Briefings*", and "*Recommendations for Promoting Management Improvements through Cases*" to promote daily management improvements.
- 2. The Company has organised legal education sessions on production safety, energy and environment, product quality, confidentiality, investor rights protection and other topics, and utilised the Company's official website, public account, on-site training sessions and other platforms to organise legal education.
- 3. The Company has organised legal and related personnel to participate in "legal lectures", bidding training, compliance management, contract management and other training sessions; organised directors, supervisors and senior executives to participate in compliance performance training sessions; a total of 5,733 individuals participated in the legal compliance training sessions (Note: Excluding special legal compliance training sessions organised by departments related to safety, energy and environmental protection), which has improved the legal awareness and ability to deal with legal risks of relevant personnel.





Responding to Law-Related Inquiries and Providing Legal Support on Site





Carrying out Compliance Management Training and Contract Management Training

#### (VII) Business Ethics

The Company has adhered to industry business ethics and ethical standards, implemented the "Anti-Unfair Competition Law of the People's Republic of China" and the Anti-Monopoly Law of the People's Republic of China, organised business ethics education and training for employees at both the purchasing and selling ends, and has not committed any unfair competition and monopolistic behaviours violating business ethics.

The Company has formulated and implemented the "*Insider Information Insider Registration System*" to strengthen the confidentiality of inside information, prevented insiders from abusing their privilege, leaking inside information, and engaging in insider trading, maintained the principle of fairness in information disclosure, and protected the legitimate rights and interests of investors.

The Company has formulated and implemented the "*Management Measures of Related Party Transactions*". During the Reporting Period, related party transactions of the Company followed the principles of equality, voluntariness, fairness, impartiality, openness and impartiality, and were reviewed and disclosed in accordance with the regulations of the Shanghai Stock Exchange and the Hong Kong Stock Exchange.

The Company has issued rules, regulations and documents such as the "Confidentiality Management Measures" and "Corporate Culture Concept and Behaviour System Manual", which clearly stipulates the regulations on integrity and self-discipline, honesty and trustworthiness, and confidentiality, etc. The Company has standardised employee behaviours and professional ethics, and created a corporate culture aiming to "win customer respect, employee recognition and investor satisfaction, transcend over competition, build mutually-beneficial cooperation with partners, and realise social value".

#### (VIII) Integrity Building

The Company has adhered to the principle of prioritising prevention and giving equal emphasis to punishment and prevention, and complied with external regulations such as the *Opinions* on Strengthening the Construction of an Integrity Culture in the New Era and Regulations on Implementing the Responsibility System for the Construction of Party Integrity, and revised the Management Measures for Rewards and Punishments for Whistle-blowing of Violation of Regulations and Disciplines and External Business Economic Contracts and Integrity Agreement Double Signing Management Rules and other five systems to improve the integrity construction management system.

#### 1. Anti-corruption measures

- > The Company has deepened integrity education
  - (1) The Company has strengthened the construction of working style at important time points such as festivals. The Company has paid close attention to holidays and important time points such as New Year's Day, Spring Festival, Labour Day, Mid-Autumn Festival and National Day to organise integrity education, supervision and inspection.
  - (2) More than 90 individuals including representatives of different management levels, representatives of employees in sensitive positions, representatives of party supervisors, and disciplinary inspection supervisors visited the Changshou District Integrity Education Base to enhance their awareness of purpose, law, discipline, and integrity.
  - (3) The Company has organised case warning education sessions and deepened the "four explanations based on cases". The Company has held integrity risk prevention and control and integrity industry warning education meetings in key fields such as raw and auxiliary material incoming management, equipment and spare parts management, and engineering construction investment.
  - (4) The Company has organised family support activities to "establish a clean family tradition and promote a clean culture" to build a strong family defence against corruption and degeneration.
- > The Company has improved integrity risk prevention and control.

In 2023, employees in sensitive positions signed 508 integrity risk prevention and control forms and 508 integrity commitment letters, and the units signed more than 600 integrity agreements with suppliers and other relevant parties. In the field of external communication windows, the Company has carried out special activities of "Establishing New Trends and Shaping New Image" and "Six Ones" to promote communication window positions to improve employees' service awareness, work quality and work efficiency.

> The Company has firmly cracked down on violations

The Company has strictly implemented supervision and accountability, strengthened investigation of cases, and increased the reporting and exposure of those who violate regulations and disciplines. In 2023, the Company's Discipline Inspection Commission, while collecting regular clues on issues through reporting boxes, reporting hotlines and reporting letters, strengthened the discipline inspection personnel to visit the grassroots level and visit users in order to collect clues, and developed and launched the "Report on Anti-Corruption Code" QR code way to collect clues. Throughout the year, seven violators were punished with party and government disciplinary sanctions, which achieved good results.

> The Company has strengthened the construction of an integrity team

In 2023, the Company strengthened the political construction, capacity building and integrity building of the discipline inspection and supervision team, improved team building, and promoted better performance of the role of supervision and discipline enforcement. The Company organised and held the 2023 Annual Discipline Inspection Supervision Training and Discipline Inspection Supervision Duty Performance Improvement Training Meeting, and participated in the Baowu's special inspection and inspection training on scientific and technological innovation, practical training on the inspection agencies, and centralised training for auditors. The number of employees participating in anti-corruption related training in 2023 was 710, marking an increase of 153.57% compared with that in 2022.



Integrity Practice Warning and Education Sessions



Visit the Integrity Education Base



Family Support for Integrity

#### 2. Complaints and reporting channels

The Company has set up anti-corruption reporting mailboxes in key fields and external communication windows and established a whistleblower protection mechanism. In March 2023, the Company opened the "Anti-corruption and Integrity Code Reporting" online supervision channel, which mainly handles cases of violations of political disciplines, organisational disciplines, integrity discipline, mass discipline, work discipline, life discipline and other party discipline aspects by party members of the Company, as well as the behaviours of the Company managers and employees who fail to perform their duties and violate relevant regulations on integrity.



#### (IX) Information Security

In accordance with relevant laws and regulations such as the *Cybersecurity Law of the People's Republic of China*, the *Data Security Law of the People's Republic of China*, the *Personal Information Protection Law of the People's Republic of China*, the Company has formulated the "*Cybersecurity Management Measures*" and "*Network and Information Security Emergency Plan*" to clearly specific cyber and information security management responsibilities, operating mechanisms, and cybersecurity incident handling procedures. The Company implements the responsibilities for cybersecurity in accordance with the principles of "whoever builds is responsible, whoever is in charge is responsible, whoever operates is responsible, whoever uses is responsible" and "domain management". The Company's units promote cybersecurity construction, formulate cybersecurity emergency plans, and improve cybersecurity and emergency response capabilities.

In 2023, the Company utilised the cybersecurity situational awareness platform to improve cybersecurity supervision capabilities; completed cybersecurity assurance for major events and cybersecurity defence drills; strengthened cybersecurity training and organised regular cybersecurity inspections. There were "zero" major cybersecurity incidents and "zero" important Internet tampering incidents, and the Company was awarded the title of New Model Integrated Innovation Application of Chongqing Industrial Internet.

### **INNOVATION: BUILD MOMENTUM FOR DEVELOPMENT**

Lead development and win the future with innovation! Achieving a high level of scientific and technological self-reliance and self-improvement is the only way for the Company to break through the industry dilemma, win the market battle, and achieve high-quality development. In 2023, adhering to the principle of leading development with innovation, the Company optimised its management system, increased R&D input and further energised employees in an effort to usher in a better future based on innovation!

#### (I) Innovation-driven Development

In 2023, the Company successfully passed the "High-tech Enterprise" certification, and had a total of 109 patents authorised including 38 invention patients, increasing by 21 than 2022; moreover, the Company's "Key Laboratory of Steel Purification and Inclusion Control" was recognised as a key laboratory of industry and information technology in Chongqing.

#### 1. Innovation mechanism

Technology innovation management system: Decision-making level (Technology Innovation Committee), consulting level (expert resource base), management level (Manufacturing Management Department and other management departments), and implementation level (all units of the Company).

Technology innovation management principles: Centralised management and promotion level by level; overall planning and policy orientation; industry synergy and resource sharing.

In 2023, driven by "improving the technology innovation system and intensifying the development of high-quality products", the Company revised and improved 14 science and technology management policies, and coordinated the promotion of technology innovation, product innovation, management innovation and employee post innovation, creating a strong atmosphere of innovation among all employees.

#### 2. Innovation actions

#### > Research projects

By virtue of its "technology innovation" platform, the Company advanced a total of 85 scientific research projects during the year, an increase of 21 year on year. Additionally, the Company carried out 83 company-level research projects, participated in one national key R&D programme, and won one third prize of Chongqing Technological Invention Award.

#### > New product development

During the year, 48 new products were trial-produced, the cumulative sales volume of new products such as medium and heavy plates, hot coil and long products reached 1,205,700 tons, and the sales revenue of new products accounted for 13.15%.

#### Case: The first composite hot rolled coil product made of stainless steel by Chongqing Iron & Steel was successfully rolled on a trial basis

As a resource-conserving product, composite hot rolled coils are widely applied in numerous fields such as automobile, electronics, home appliances, machinery and architecture. Chongqing Iron & Steel unswervingly implements the strategy of high-end development and intensifies high-end R&D and innovation to expand differentiated competitive advantage. On 7 October 2023, the first stainless steel composite hot rolled coil independently developed by the Company with a weight of 14.51 tons was successfully rolled on a trial basis based on the introduction of Baosteel technology and the innovative adoption of the direct rolling process!




### Case: The list of key laboratories of industry and information technology in Chongqing in 2023 was released, with Chongqing Iron & Steel being successfully included in the list!

The Key Laboratory of Steel Purification and Inclusion Control of Chongqing Iron & Steel was approved as a key laboratory of industry and information technology in Chongqing in 2023. Relying on the National Enterprise Technology Centre and the National CNAS Laboratory of Chongqing Iron & Steel, the Key Laboratory of Steel Purification and Inclusion Control is committed to adopting new processes and technologies to produce long-life, high-strength and high-ductility steel materials characterised by high uniformity, high cleanliness, high precision and ultra-fine grain structure. In recent years, a series of innovative results have been achieved, and products such as weather-resistant structural steel, weather-resistant bridge steel, and bridge steel used for track beam with an unevenness of less than 3 mm per meter have been successfully used in a number of projects such as the "aerial suspended rail train" project in Dayi County, Chengdu City.



Post innovation

The Labour Union of the Company continued to work on the establishment of an employee post innovation system centring around the enhancement of innovation awareness, cultivation of innovative thinking, improvement of innovation capability and stimulation of innovation vitality.

- (1) In 2023, 84 innovative results were fully transformed, which is expected to create an annual revenue of RMB49,551,300 (26 times higher than in 2022), exceeding the annual task target.
- (2) In 2023, the Company solicited a total of 343 post innovation results, with three of them being evaluated as Baowu "golden ideas", 16 as "silver ideas" and 28 as "good ideas", and four innovative individuals evaluated as "masterminds". Additionally, the Company won one second prize and five third prizes of Baowu Excellent Post Innovation Results Award, and gained one professional self-management result and one Baowu demonstrative innovation studio.

- (3) In 2023, 11 innovation studios obtained a total of 343 patent application numbers, accounting for 66.3% of the Company's total; the per capita innovation result of the Company's innovation studios reached 3.62 or above, and Liu Xiaofeng Innovation Studio was evaluated as Baowu demonstrative innovation studio.
- > Management innovation

In addition to technology innovation, the Company also deepened management innovation, and constantly introduced new ideas and new methods to promote the cultivation, summary and application of management innovation results, thus improving the Company's management. In 2023, the Company solicited a total of 19 management innovation results, with three projects winning awards from Baowu Group. Specifically, the "Management Innovation and Application of Coal Resource Map" won the second prize of the Baowu Group Award for Management Innovation Results, and the "Pilot Exploration and Practice of the Management Mode Featuring the Integration of Operation and Inspection" and the "Exploration and Practice of the Acceptance Mode for Grassroots Basic Management" won the third prize of the Baowu Group Award for Management Innovation Results.

### 3. Intellectual property rights

The Company has formulated relevant policies on intellectual property rights, such as the *Measures for the Management of Scientific and Technological Results*, the *Measures for the Management of Trademarks*, and the *Standards for the Management of Incentives for Intellectual Property Rights*, with a view to strengthening the protection of intellectual property rights and stimulating innovation vitality.

In 2023, the Company applied for a total of 517 patents, increasing by 125 than 2022. Specifically, the number of invention patents applied for was 439, an increase of 169 than 2022. In 2023, the Company had a total of 109 patents authorised, including 38 invention patents (increasing by 21 than 2022) and 71 utility model patents.

### 4. Industry-university-research cooperation platform

During the Reporting Period, the Company carried out industry-university-research cooperation with a number of colleges and universities such as the University of Science and Technology Beijing, the North China University of Technology and the Northeastern University to improve its technology development capability.



### 5. Cultivation of innovative talents

Attaching importance to the building of scientific and technological talent teams, Chongqing Iron & Steel defines the cultivation mechanism for scientific and technological talents, tracks and evaluates the cultivation process, opens up the promotion channel for scientific and technological talents, and enables scientific and technological talents to play a backbone role in innovation, so as to form an innovation team with increasingly reasonable structure, plentiful levels and strong technical strength. At present, the number of the Company's R&D personnel accounts for 17.33% of the total number of employees, with 63 ones holding master's or doctor's degree.



### (II) Intelligent Manufacturing

### 1. Intelligent manufacturing management

In 2023, centring around the "4321" digital and intelligent path built by Baowu, the Company further promoted its technical transformation and green intelligent manufacturing projects for quality and efficiency improvement to accelerate the transformation from "traditional manufacturing" to "digital manufacturing". Based on the four-dimensional "point-line-plane-body" "Intelligent Agent" architecture of Chongqing Iron & Steel, the Company pushed forward its intelligent manufacturing work in a high-standard manner in strict accordance with relevant requirements. In 2023, the Company maintained the certification of the integrated informatisation and industrialisation management system, with its "four 'no exception' "index increasing to 65.93%, "data release onto platform" index increasing to 91%, and intelligence index increasing increased to 75.33%, well achieving the annual target.



### 2. Intelligent manufacturing projects

In 2023, the Company newly established an intelligent dynamic energy control system and an intelligent equipment management system, optimised and upgraded its decision support system, and dynamic logistics control system, promoted the development of the "planned value and standard cost management system" and the "CE Plus" system, realised the multidimensional analysis of the real profitability of various varieties and grades, and fully supported the business analysis and decision-making on supply, production and marketing. In 2023, the *Construction of the Intelligent Operation Management and Control Platform of Chongqing Iron & Steel (Phase I)* successfully passed the review of integrated innovation application of the mew mode of Industrial Internet in intelligent manufacturing in Chongqing. The highly integrated, intelligent and smart operation management and control platform covering the whole production line that is built by the Company relying on Baowu ePlat Industrial Internet Platform obtained a financial subsidy of RMB5 million in the field of industry and information technology in Chongqing (second batch).

A total of 53 BaoRobots, such as automatic steel casting robots for conticaster and long product inspection and testing robots, are put into use to solve the problem of "3D" post and promote the realisation of essential safety. In 2023, the Company participated in the first "BaoRobot Cup" Robot Innovation Competition sponsored by Baowu Group, during which the team of intelligent steel casting robots for conticaster of Chongqing Iron & Steel won the third prize; in the special competition of "BaoRobot Benefit Creation and Excellence Pursuing", the long product stretching robot of Chongqing Iron & Steel won the honour of "Bronze BaoRobot", and the BaoRobot pioneer team for rapid sorting in Series II steelmaking won the honorary title of "BaoRobot Pioneer Team".

# Case: The Intelligent Centre of Chongqing Iron & Steel was officially put into operation, further accelerating the digital and intelligent transformation of the Company

On 23 December 2023, the Intelligent Centre of Chongqing Iron & Steel was officially put into operation, which mainly focuses on the stable operation of blast furnace. With its technical architecture based on xIn3Plat, the Industrial Internet platform of Baowu Group, the Intelligent Centre is a "OneMill" intelligent centre integrating production operation, energy dispatching and pre-ironmaking operation. As an important measure for the Company to promote digital and intelligent transformation, empower lean production and ensure the transparency of production organisation, dispatching and operation in each process, and thus address the blind spots in collaboration between different processes with "intelligent" means, the Intelligent Centre will promote the "high-efficiency" production and operation of Chongqing Iron & Steel, and contribute to the green, low-carbon and high-quality development of the Company.



### **GREENNESS: FEATURE CHONGQING IRON & STEEL'S CORPORATE IMAGE**

Following the concept that "green waters and lush mountains are invaluable assets", the Company earnestly implemented Xi Jinping's Thought on Ecological Civilisation. In strict accordance with requirements by initiatives of "Higher than Standards, Better than Urban Areas and Integrated into City", and the "treatment of three wastes – waste gas, waste water and solid waste" and "cleaning, greening, beautifying and civilising" launched by China Baowu, it proactively advanced its energy conservation and emission reduction efforts and stayed committed to the path of green and low-carbon development, playing its role in promoting high-quality development of the Yangtze Economic Belt and Changshou District.

### (I) Greenness and Environment-friendliness

**Environmental protection policy:** Law-abiding integrity, all employee participation; prevention first, publicity and supervision going hand in hand; energy conservation and emission reduction, clean production; environmental protection for shared harmony

Environmental protection goals: Green, low-carbon and environmentally friendly development.

### 1. Environmental management system

The Company made a Three Years' Plan for Environmental Protection Capability Improvement. Referring to related laws, regulations, and other requirements, it formulated its well-tailored rules and regulations, including *Comprehensive Management Measures for Greening and Environmental Sanitation, Comprehensive Management Standards for Greening and Environmental Sanitation, Environmental Monitoring Management Measures*, and *Environmental Incident Accountability Management Measures*. With increasing green index as main target, and ensuring lawful environmental protection actions as core concept, the Company made every endeavour unceasingly to promote its capability of achieving the initiatives of the "treatment of three wastes – waste gas, waste water and solid waste" and "cleaning, greening, beautifying and civilising", and to improve its environmental protection management system.

Its environmental protection management system was audited by internal personnels and external experts and authenticated. In June 2022, its cleaner production was approved and is valid by now.

### 2. Environmental protection performance management.

The Company formulated the *Energy and Environmental Protection Work Plan for 2023* and the *Targets and Indicators of Environmental Protection Management and the Supporting Breakdown Table for 2023*. In addition, it listed the Party committee's leading groups' related responsibility, organised production units to complete the signing of Energy Conservation and Environmental Protection Target Responsibility Statement. Moreover, it also made solid efforts to ensure all related units and personnels of all levels fulfil their due responsibilities in this course by taking their actions into consideration in performance evaluation, and ensure that both Party committees and governments assume their responsibilities for environmental protection in performing their duties.

During the Reporting Period, the Company made unceasing efforts to consolidate its achievements in the construction of green urban steel factories with a total of RMB1,498 million invested in environmental protection. It fulfilled all emission reduction targets as required, and avoided all environmental incidents of category A or B listed in the *Measures for Accountability for Environmental Protection Incidents*, thus receiving no major related penalty.

Table of Completion of Indicators					
No.	Indicator	Unit	Indicator	Number in 2023	Performance
1	Environmental incidents of category A and B	Times	0	0	Completed
2	Total emissions of sulphur dioxide	ton	≤ 4,000	2,759	Completed
3	Total emissions of nitric oxides	ton	≤ 6,700	5,792	Completed
4	Discharge of wastewater per ton of steel	m³/ton	≤ 0.8	0.71	Completed
5	Total emissions of COD	ton	≤ 150	109.6	Completed
6	Amount of dust reduction of the Company	Ton/month $\cdot$ km <sup>2</sup>	≤ <b>1</b> 4	13.8	Completed

### 3. Environmental impact assessment

The Company formulated such regulations as Administrative Measures for the Environmental Impact Assessment of Construction Project and Administrative Measures for Environmental Protection for Check and Accept of Complete Construction Project, and adhered strictly to requirements of the three simultaneous system, in which facilities for pollution prevention and control are demanded to be designed, constructed and put into operation simultaneously with those of the main construction project. It conducted environmental impact assessment and environmental protection check and accept work targeted at projects proposed and under construction in 2023 on schedule, and the results demonstrated that environmental protection facilities, in good condition, operate synchronously with the main production equipment with normal indicators, ensuring lawful construction and operation of new, modified, and expanded projects. It completed and commenced the construction of No. 2 and No. 3 110 KV sintering desulfurisation power station, and 110 KV power station with coil bar respectively, and accomplished the check and accept work of projects such as new rainwater reuse project.

### 4. Environmental risk early warning and emergency mechanism

It strengthened the monitoring and publicity of environmental information, improved its ability of risk prevention and control, and stood ready to accept social supervision. To this end, it formulated the *Measures for Environmental Monitoring Management* and the *Self-monitoring Programme on Environmental Protection in 2023*, and other documents, and strictly carried out monitoring conducted both by itself and the third-party as required by the Plan. It conducted monitoring work strictly in accordance with monthly and quarterly plans, with 100% coverage of monitoring points and factors. It also disclosed information as required and strengthened its environmental risk prevention and control capabilities.

**Environmental penalty:** On 11 October 2023, the Company received an administrative penalty of RMB77,375 from the environmental protection enforcement detachment of Changshou District of Chongqing, for not having its automatic monitoring equipment for chimney discharge outlet of coke oven networked with the Department of Ecology and Environment, and finished the rectification and conclusion of the case during the Reporting Period.

Moreover, the Company improved its emergency management and capability to respond to environmental emergencies. In accordance with the approach of "prevention is first" and the principle of "unified command, being unhurried in the face of danger, buying time for emergencies, reduction of hazards", the Company formulated the *Chongqing Iron & Steel Environmental Emergency Plan*, and launched all-level environmental emergency response drills as planned. For example, in May 2023, it hosted the environmental emergency response drill of Changshou District, in which it organised and conducted joint drills for the disposal of tank leakage incidents in the chemical production area, effectively improving the joint response capability to sudden environmental incidents.

### 5. Treatment of "three wastes"

### > Ultra-low Emission of Waste Gas

According to national regulations and policies included in the Law of the People's Republic of China on the *Prevention and Control of Atmospheric Pollution*, *Implementation Opinions on Ultra-Low Emission for Iron and Steel Industry*, and *Guidelines for Ultra-Low Emission Technological Reconstruction for Iron and Steel Industry*, and the *Measures for Atmospheric Pollution Prevention and Control* formulated by itself, the Company conducted related work to meet ultra-low emission requirements. It revised the Action Plan for the Ultra-Low Emission Transformation and the Building of Environmental Protection Performance Level-A Enterprises to clarify work targets and measures, and conducted inspection and assessment of progress of ultra-low emission technological reconstruction through weekly meetings under the same theme. Table of transformation and evaluation of ultra-low emission and clean transportation completed in 2023.

Indicator	2021	2022	2023
Total emissions of sulphur dioxide (ton)	4,443	2,948	2,759
Total emissions of nitric oxides (ton)	7,282	7,817	5,792
Total emissions of particulate matter (ton)	9,000	5,250	5,600

### Case: Clean transportation promotes ultra-low emission transformation

Chongqing Iron & Steel adopted transportation by water, sea, or hydrogen-powered vehicle during the procurement of ores and auxiliary materials and the sales of products and by-products. It replaced more than 500 incoming and ex-factory vehicles that meet the "China VI" vehicle emission standards, 145 non-road mobile machines that meet the "China III" or higher standards, and 178 transportation vehicles that meets the "China VI" in the factory, hence ensured green and low-carbon transportation. On 19 October 2023, the transformation and evaluation of Chongqing Iron & Steel's ultra-low emission and clean transportation was publicised by the China Iron and Steel Association, the former of which thus became the first steel company in Southwest China to finish the work mentioned above.





### > Zero Waste Water Discharge

During the Reporting Period, the Company coordinated the work of achieving zero waste water discharge and environmental governance. In accordance with the *Wastewater Treatment Measures* and The *Working Plan for the Special Action of Zero Waste Water Discharge in 2023*, it carried out the work of rainwater and sewage diversion, wastewater source reduction, achieving zero discharge in unit areas and increasing production without increasing water withdrawal from Yangtze River, thus made solid progress in fulfilling the target of zero wastewater discharge.

Indicator	2021	2022	2023
Total wastewater discharge (ton)	865	767.75	735
Total emissions of COD (ton)	167	155	109.6
Total ammonia nitrogen emissions (ton)	17.42	11.68	8.3

### Treatment approach

- (1) Advance the reduction of waste source Through water balance testing, pipe network troubleshooting and some other work, the Company had an accurate and comprehensive understanding of the discharge of used water. At the same time, it drew water discharge diagram of the area, and conducted technological examination and control of abnormal water discharge in a timely manner when the volume of water consumption or drainage is unbalanced, reducing the source of waste water discharge.
- (2) Optimise and eliminate the defect of wastewater treatment. To address such difficulties as unstable quality and complex components of inlet water, it established water quantity and quality standards. Moreover, it solved problems such as high hardness of pre-treatment effluent, organic enrichment in the system, and clogging of advanced treatment membrane systems through technical special research.
- (3) Carry out cascade utilisation and strengthen recycling. The Company developed approaches such as sending concentrated brine to blast furnaces for slag flushing to realising the comprehensive utilisation of wastewater, thus reducing wastewater discharge by 3,000m<sup>3</sup>/d. It also modernised the water supply in circulating water stations of iron-making plants, sintering plants and steel-making plants by replacing fresh water with recycled water, thus reducing the discharge of recycled water by 6,000m<sup>3</sup>/d.
- (4) Build an innovative and comprehensive management smart system for water use and drainage. The Company incorporated water used measurement, water quality monitoring, drainage measurement, water pollutant monitoring, etc. into an integrated information system, thus strengthened its lean management and reduced wastewater discharge.

### Treatment achievement

The Company finished the work of checking and accepting the three systems, namely, the *Zero Wastewater Discharge in Central Area* Phase I, the *New Rainwater Reuse*, and the *Special Wastewater Treatment and Reuse*, and incorporated them into production operation control to achieve the recycling and reuse of unconventional water resources, reducing wastewater discharge by approximately 15,000 m<sup>3</sup>/d.

The concentration of pollutant discharged from rainwater outlets, phenolcyanogen wastewater outlets, and the main wastewater outlets is under observation on a daily basis with online monitoring and manual monitoring, and the operation of wastewater treatment facilities was optimised, ensuring that wastewater outlets meet standards stably.

It replaced new water with reclaimed water, realised the multi-stage and cascade utilisation of production wastewater, and reduced the volume of discharged wastewater.



Chongqing Iron & Steel's water treatment system

### No Solid Waste Leaving the Factory

In 2023, it actively implemented requirements made by local government, Baowu Group, and by the Company in the *Measures for Construction Waste Management* and the *Measures for Industrial Solid Waste Management* and the *Measures for Hazardous Waste Management*. It consolidated the existing achievements of No Solid Waste Leaving the Factory, improved its management of industrial solid waste and hazardous waste, and assisted in the construction of waste-free cities, achieving the 100% goal of no solid waste leaving the factory.

Indicator	2021	2022	2023
Comprehensive utilisation rate (%)	99.88	99.92	100
Return to production rate (%)	17.88	19.38	22.74
Recycled product selling rate (%)	71.14	100	100
Rate of hazard waste compliance disposal (%)	100	100	100
Rate of no solid waste leaving the factory (%)	76.22	99	100

• **Work objectives**: Maximise the reduction of source of solid waste, minimise the discharge of solid waste, standardise the collection and storage, optimise the utilisation and disposal, productise the renewable resources, and intelligentise the supervision and monitoring.

### Treatment approach

- (1) Source reduction: Optimise production processes to reduce the generation of solid waste from the source.
- (2) Return to production: Sort out the types of solid waste through benchmarking, optimise the way of utilising iron dust and mud, adjust the settlement mode of steel slag treatment business, and enhance the enthusiasm of processing units for returning to production.
- (3) Productisation certification: Carry out ten standard authentification of industrial solid waste, including one at national level and nine at enterprise level.
- (4) Coordinated disposal: Continue the work of sorting, baling and coordinated disposal of industrial waste.

## 2023 Environmental, Social and Governance Report (Continued)

- (5) Standardised storage: The Company established hazardous waste warehouses with supporting facilities such as fan room, pump room, and emergency accident pool. Additionally, it devised a comprehensive process for the receipt, distribution, and storage of hazardous waste. Consequently, the management of this waste transformed from being decentralised and handled by multiple individuals to being centralised and overseen by dedicated personnel, resulting in a more specific and streamlined approach.
- Hazardous waste management: The Company carried out three training sessions on standardised management of hazardous waste to ensure the implementation of new specifications and standards. The mark, signal and ledger of hazardous waste warehouses were updated in accordance with related requirements to ensure the collection, storage, and disposal of the waste comply with regulations.

### 6. Prevention of radiation and noise pollution

The Company formulated the *Measure for Radiation Management*. Moreover, it conducted training on radiation safety and protection aiming at workers being exposed to radiation, who are required to carry with them radiation dosimeters, which were sent to the third-party for monitoring every quarter and were proved to be qualified. The Company conducted regular and irregular inspections on the use and storage of radioactive sources. For example, the Chongqing Municipal and Changshou District Ecological Environment Bureaus had conducted supervisory inspections on the Company's radioactive sources and radiation devices, and the results showed that the management ledger of radioactive sources was complete and the related workplaces comply with laws, regulations, and other requirements.

The Company also formulated the *Measure for Noise Emission Management* to standardise the management. According to the annual monitoring plan, the noise within the Company's factory was monitored every quarter, results of which were all below the standard limits of 65 dB during daytime and 55 dB during nighttime. In addition, other noises were also monitored to be under the regulated volume. Therefore, the work and result of the Company's noise monitoring met related regulations.

### 7. Training and education on environmental protection

It vigorously promoted education, training and publicity of environmental protection, as well as improved the environmental awareness of its employees, partners in the factory area, and surrounding residents. The Company organised special training on Xi Jinping's Thought on Ecological Civilisation to promote the concept that green waters and lush mountains are invaluable assets. It also studied laws and regulations such as the *Law of the People's Republic of China on Prevention and Control of Environment Pollution by Solid Waste*, the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, and the Water Pollution Prevention and Control Law of the People's Republic of China. Moreover, it compiled the Typical Cases of Environmental Incidents and organised the study of this Cases for warning. Its employees participated training on environmental protection policies and systems, and they attended 6 periods of training on ecological civilisation on average in a year.

The Company invited more than 70 people, including personnels from the Ecological Environment Bureau and the Responsible Care Association from Changshou Economic and Development Zone, and residents of Jiangnan Subdistrict, to attend society-enterprise environmental protection publicity lecture and for a visit at the factory. It also organised the environmental protection facilities open day under the theme of "People First, Serving Masses – Changshou Environmental Enforcement Takes Action" and the activity of "Visiting Enterprises" under the theme of Beautiful Chongqing promotion. By doing so, it demonstrated its outstanding accomplishments in terms of environmental protection in the new era and its significant practices in the course, hence the establishment of its green and satisfactory image.





Environmental protection activities on the World Environment Day





Environmental protection facilities open day in Changshou District

### 8. Green steel factory protects biodiversity

The Company faces the Yangtze River and backs against Longshan Mountain. During the Reporting Period, it followed relevant laws, regulations and policies on energy conservation, environmental protection and biodiversity conservation, and further implemented Xi Jinping's Thought of Ecological Civilisation and the national Yangtze River Protection strategy. It also formulated and implemented the *Action Plan of Chongqing Iron & Steel for Green Index Improvement in 2023* and the *Work Plan for Yangtze River Protection in 2023*, insisting on harmonious development with surrounding ecological environment, protecting biodiversity, and striving to become a new model for steel plants along the river.

> Remarkable improvement of factory environment

The Company launched special inspections on the appearance of the factory, and developed a long-term management mechanism of daily supervision, weekly notification, and monthly evaluation. By doing so, the problem of randomly piled up items at the production site was effectively controlled, and the awareness of fixed location and management was further improved. The "5S" evaluation of greenbelt management was carried out every quarter, and the number of greenbelts that met the "5S" standard accounted for 10.7% of the total, while the greening rate within the factory area grew to 35.5%. At the same time, the air, water and noise volume at the plant area met the requirements of wild animals and plants for being alive. The Company successfully established it as a national exemplary organisation for metallurgical greening.

> Pursuing greener development

The Company organised the publicity and implementation of the green urban steel factory indicator system, improved the responsibility system for green index improvement, and actively created a waste-free steel factory featuring "ultra-low emission of waste gas", "zero waste water discharge", and "no solid waste leaving the factory". With efforts, it aimed to avoid negative impacts on the natural ecological environment and environmental pollution incidents. The Company promoted the building of AAA scenic spots, and its annual green index increased from 74 in 2022 to 76 in 2023, earning honorary titles of "Green Development Benchmark Steel Enterprise" and "Chongqing Environmental Protection Credit Enterprise".

## 2023 Environmental, Social and Governance Report (Continued)



Ecological environment in the factory

### (II) Energy Conservation and Low Carbon Emissions

### 1. Energy management system

In 2023, the Company put "extreme energy efficiency" and "low-carbon development" as the leading instruction of cost reduction, efficiency improvement and development pursuit. Therefore, it improved the energy system, optimised management system, streamlined related processes, and formulated new regulations such as the *Special Assessment Standards for Industrial Energy Consumption Indicators of Chongqing Iron & Steel* and the *Evaluation Standards for Energy Management Process of Chongqing Iron & Steel* to enhance its management efficiency. In 2023, its certification authorised by the Management System for Energy was maintained.

### 2. Energy efficiency management

The Company formulated the Plan of Key Points of Energy and Environmental Protection Work for 2023 to assign the annual target responsibilities at all levels and incorporate related performances into the annual evaluation. The comprehensive energy consumption per ton of steel was 512.95 kgce/t in 2023, a decrease of 3.78% compared to 2022, showing the Company's ability to reduce the consumption to less than 500 kgce/t; and 33.3% of its processes stood as a benchmarking in terms of energy efficiency.

Indicator	2021	2022	2023
Comprehensive energy consumption			
(10,000 tons of standard coal (equivalent value))	468.03	529.05	608.68
Comprehensive energy consumption per ton of steel			
(kgce/t)	547.68	533.1	512.95
Total annual new water consumption (ton)	3,555.82	3,523.45	4,584.02
New water consumption per ton of steel			
(cubic meter/Ton)	3.3	2.83	2.66

### 3. Energy conservation measures

Upholding the management concept of "optimal management, minimum consumption" and "collecting all available secondary energy", the Company promoted energy conservation and consumption reduction mainly by growing into a benchmarking in terms of energy efficiency in key processes, increasing the amount of recycled secondary energy, and generating more power by itself.

(1) It strengthened the publicity and implementation of energy policies made by national and local government and those related to carbon peaking and carbon neutrality with monthly meeting and WeChat group under the theme, and WeChat official account and other platforms. It also organised energy-saving week, energy measurement and other training to strengthen related personnels' energy-saving awareness and improve their professional quality.

- (2) It deeply explored potential ways to save energy and actively introduced related advanced, mature and reliable technologies. It organised energy-saving technology exchanges on blast furnace slag flushing water and sintering low-temperature waste heat recycle, roof-mounted photovoltaic power generation, coking riser waste heat recovery, hydrogen utilisation, energy storage, etc., and conducted preliminary field research, project approachment, and compiled project pre-feasibility study report.
- (3) The Company promoted the implementation of energy-saving projects. It completed the approval approachment of energy management project for the contract of No. 3 and No. 4 coking riser waste heat recovery, constructed and put the energy-saving project unfinished in 2022, "Energy-saving Reform of Baking Apparatus of Steel Ladle and Tundish in Steel Plant", into operation, and promoted the implementation of energy-saving projects such as "elimination of high energy-consuming and outdated motors", "elimination of high energy-consuming and outdated transformers", and Mitsubishi Gas Turbine Inlet Cooling System Reform. There were a total of 7 energy-saving projects in 2023. And it is expected that the annual amount of energy saved will be 7,464 tons of standard coal after the implementation of these projects.

### Case 1: Energy-saving and low-carbon steelmaking with hot metal ladle with cover

Previously, the technology adopted by the Chongqing Iron & Steel was "whole process with one ladle", which was to fill open-topped iron ladles with hot metal. In that way, with the open-topped ladle, a large amount of heat was emitted, increasing the temperature drop rate of the ladle refractory materials while decreasing the service life of the ladle, hence increased production costs.

In 2023, it was introduced the hot metal ladle with cover, and finished the project of equipping 19 hot metal ladle cars with covers (largely completed and some of the cars were put into operation). After covering, the temperature of iron metal was reduced by about  $3.8^{\circ}$  and the heat loss per ton of hot metal was reduced by more than 1,500kj/h. More over, with these devices, the factory could pour hot metal into hot ladle, and keep from metal condensation and spraying, enhancing the service life of ladle refractory materials, further reducing the comprehensive cost of steelmaking, and providing strong impetus for low-carbon steelmaking.



Hot metal ladle is closing



Training on hot metal ladle with cover

# Case 2: In 2023, the Company generated 3,955 million kWh of electricity, which covered nearly 90% of its consumption.

In October 2018, the Chongging Iron & Steel launched the self-generated electricity project to maximise the absorption of surplus coal gas emitted during the steel production. Drawing on advanced energy-saving technologies in the industry, the Company continued its efforts for energy conservation and efficiency improvement. After optimisation and transformation of the electricity generation system, the electricity generated by each set of its "gas-steam" circulating units increased by 1.5 megawatts per hour on average, hence an additional 5,875,000 kWh of electricity generated per year by each device. It also explored ways to reduce the waste heat loss occurred in steam turbine generator units. By using new insulation materials to reduce the heat loss during steam transmission, it achieved an additional economic benefit of RMB1.1 million from electricity generated per ton of coke. It carried out extreme energy efficiency management, and continuously improved its energy management system by benchmarking indicators of electricity consumption per kilowatt hour, electricity generated per ton of ore, electricity generated per ton of steel, steam output per ton of coke and other indicators of exemplary enterprises in the industry.



Chongqing Iron & Steel's Self-generating Energy Equipment

### 4. Water resources management

Following the *Water Law of the People's Republic of China* and other laws and regulations as well as water policies, the Company formulated the Administrative Measures for Industrial Water and Water Quality, and clarified the management responsibilities and business processes for domestic water, industrial water (new water), whole-plant recycled water, primary demineralised water, secondary demineralised water, and condensed water in the factory area. Its new water consumption per ton of steel in 2023 was 2.66 cubic meters per ton, a decrease of 6% compared to that in 2022.

- > Management Initiatives
  - 1. According to national or industrial water withdrawal regulations and indicators, the Company regularly designated water consumption indicators and decomposed them to each secondary water-user unit to ensure compliance water withdrawal and strengthen source management.
  - 2. Moreover, it strengthened its control of circulation rate of circulated water, improved and controlled the quality of recycled water, and increased the consumption of recycled water while reduced that of new water. The coking recycled water was fully utilised in the blast furnace slag flushing water system to reduce environmental risks and new water consumption. The annual consumption of coking recycled water was 1.37 million m<sup>3</sup>.

## Case: "Small transformation" breeds "big energy": Reduce the consumption of new water

Before the renovation, the Ministry of Energy and Environmental Protection utilised relatively larger amount of new industrial water for the cooling of the water withdrawal motor, resulting in insufficient water saving and comprehensive water reuse in that area, as well as unreasonable water use and high water consumption and new water costs. Based on the quality of water for the cooling of the water withdrawal motor and its pipe network layout ways, the Ministry independently designed and renovated the pipe network of the water for the cooling of water withdrawal pump station motor, achieving mixed multi-level utilisation of water. The water used for the cooling of water withdrawal motor was new industrial water and the water from Gangyun Lake. The daily consumption of new industrial water was 500 tons, a decrease of 1,900 tons per day, and the expected cost reduction was about RMB1.66 million per year.



Special waste water treatment system

### 5. Carbon Peaking and Carbon Neutrality Management

### Corporate Governance Structure

In 2021, the Company established the Carbon Neutrality Promotion Committee to further strengthen its top-level design and organisation with the aim of promoting green and low-carbon development in a coordinative manner. It also established a Carbon Neutrality Office, with the director being the Company's senior vice president in charge of energy and environmental protection, and the deputy director being the head of the Energy and Environmental Protection Department. The works of the Office included promoting innovation, cooperation, and best practice promotion in the field of green and low-carbon scientific technology, as well as daily work such as carbon data and carbon asset management of the Company.

### > Planning and objectives

Considering the real practice, it revised the *Plan of Chongqing Iron & Steel for Peak Carbon Emission and Low Carbon Development,* which sets "near, medium and long-term" targets in three stages: carbon peaking in 2023, obtaining the technological capability to reduce carbon by 30% in 2025, carbon reduction by 30% in 2035, and carbon neutrality in 2050.

Governance performance

According to the standards issued by Chongqing government for accounting and reporting greenhouse gas emissions, the predicted amount of greenhouse gas emission intensity was 1.5t/t steel, and the total greenhouse gas emissions were about 15.82 million tons (including those produced during electricity generation by Chongqing Iron & Steel), basically reached the carbon peaking, and promoting energy conservation and emission reduction with a total carbon reduction of 62,418 tons in 2023.

Indicator	2021	2022	2023
Total emissions of carbon dioxide (ton)	13,446,535	13,434,587	15,822,662
Emissions of carbon dioxide (Scope 1) (ton)	12,912,804.75	12,901,331	15,416,869
Emissions of carbon dioxide (Scope 2) (ton)	533,730.25	533,256	405,793
Emissions of carbon dioxide per ton of steel (ton)	1.576	1.578	1.504

> Actions and Pathway

We should actively promote carbon peaking and carbon neutrality by focusing on "6C" carbon reduction.

(1) Planning for carbon reduction: The Company completed the revision of the plan for carbon peaking and low-carbon development, which provided a direction for low-carbon development from 2023 to 2030, and gradually implemented it accordingly.

- (2) Efficient carbon reduction: It focused on growing into a benchmarking in terms of energy efficiency in key processes by formulating an action plan, thus reducing the energy consumption occurred during blast furnace-related processes by 18kgce/t in 2022; improved the utilisation efficiency of residual energy resources, increased the amount of electricity generated by TRT per ton iron and by sintering per ton ore, securing a rate of 84.5% of self-generated electricity accounting in its total electricity consumption, and a gas bleed rate of 0.18%, all of which fulfilled annual indicators; promoted energy-saving projects, achieving carbon reduction of about 12,000 tons of carbon dioxide equivalent with technological advancement.
- (3) Technical carbon reduction: Focusing on hot delivery and direct rolling, and hot delivery and hot charging, Chongqing Iron & Steel achieved the reduction to 15 kgce/t of energy consumption of its first double high rods production line of continuous casting and direct rolling, basically achieving full production and full efficiency. And its comprehensive hot delivery and hot charge ratio increased by 1.6% year-on-year.
- (4) Technological carbon reduction: The Company conducted research on the technological solution of carbon dioxide injection at the bottom of the converter with Beijing Kingtech Co., Ltd., a low-carbon technological enterprise, to explore technological ways for carbon reduction.
- (5) Green carbon reduction: It actively advanced the construction of photovoltaic phase I project by utilising solid waste and hazardous waste plants, and promoted clean transportation, becoming the first enterprise in Chongqing to complete the transformation and evaluation monitoring of ultra-low emission clean transportation.
- (6) Carbon reduction within its area: It strengthened the management of solid waste in the factory area, and explored feasible solutions for utilising metallurgical furnaces to process solid waste and hazardous waste from society.

### > Strengthen the management of carbon emission data

The Company carried out training on GHG verification and data management to familiarise related personnels with information about GHG verification. It actively communicated with regulatory agencies, thus completed the GHG validation for the period from 2018 to 2020 of Chongqing Iron & Steel and Chongqing Iron and Steel Energy and Environmental Protection Co., Ltd., as well as the verification of and reporting to system information of the local carbon market in 2021 and 2022, and the national greenhouse gas emissions verification and reporting for 2021 of these two enterprises It also disclosed its achievement of energy conservation and carbon reduction in accordance with the management requirements for listed companies.

### Case: Accelerate the construction of carbon emission informationisation system

During the Reporting Period, Chongqing Iron & Steel accelerated its work of carbon informatisation, and incorporated the construction of the related system in its second phase of the economic management project. It also made plans to expand the national carbon market for the two enterprises, and complemented the accounting page, data construction, and gap calculation and other functions of the data sheet. Moreover, it continuously improved its carbon emission management system, enhanced data quality management, simulated carbon emission gaps and process carbon emissions benchmarking, promoted green electricity trading at the right time, timely grasped the dynamics of the carbon market and the Company's carbon emission data. The system was completed and put into use by the end of 2023.

> Carbon quota performance and trading

The distribution method of the Company in 2021 and 2022 changed from considering historical total reduction to considering historical intensity reduction, with an increase of about 130,000 tons of carbon emission allocation. During the Reporting Period, it fulfilled its carbon-related target for 2021, and it is expected to fulfil its target for 2022 in March 2024.

Green products

It aimed to promote the industrial chain to transform into greener and more low-carbon one, and to promote its green product at the same time. Following the successful issuing of the three EPDs (Environmental Product Declaration) at the Iron Ore EPD Issuing and Steel EPD Platform Centralised Release Ceremony held in Shanghai in January 2023, Chongqing Iron & Steel released another three EPDs for low alloy structural steel plate, low alloy structural hot rolling steel plate and strip, and hot rolling ribbed steel bar of high intensity on 29 December 2023.

### ➤ Green office

The Company formulated the *Management Standards for Energy Conservation*, which clearly defined the energy conservation standards for power, domestic water, gas, steam and other energy media used in the normal production and work process. The Ministry of Energy and Environmental Protection guided and supervised all units to implement them with the aim of continuously enhancing awareness of energy conservation, cultivating good habits, and standardising daily behaviour of its employees.

Saving Electricity	Power supply of office equipment should be turned off when it is not used for a long time (after work);
Saving paper	Non-confidential documents should be transmitted through the network as much as possible to reduce the printing of paper documents; Double-sided printing of paper should be adopted, and the waste paper with non-confidential content should be used under more circumstances
Saving Water	Stopcocks at office and recreational venues must be turned off after use to prevent water waste, and water stopcocks and valves at all places should be kept in good condition

Response to climate change

Climate change is a major threat to human sustainable development. Major steelproducing countries around the world have made carbon neutrality commitments. China has also proposed the goal of "striving to reach carbon peaking by 2030 and achieve carbon neutrality by 2060". Chongqing Iron & Steel is located on the south bank of the Yangtze River. Its Carbon Neutrality Promotion Committee is responsible for promoting green and low-carbon development, while the Security Department is responsible for identifying and handling natural disasters and risks caused by climate change. The Company formulated regulations such as the *Comprehensive Measures for Risk Management*, the *Measures for Environmental Protection Management*, and the *Measures for Atmospheric Pollution Prevention and Control Management*, to actively identify and respond to climate risks. The Company formulated the *Emergency Plan for Natural Disaster Accidents*, which is for the guidance of rescue work and response to natural disasters such as flood and landslides, as well as other surrounding accidents that may affect the Company. The Plan clarified potential risks, roles and responsibilities of disaster response, action plans and processes, etc. It also carried out drills, special examination of equipment for five prevention (rain, lightning, static electricity, flood and fire) in summer, and defect rectification. The Company has an emergency rescue brigade (Chongqing Iron & Steel Fire Brigade), which is responsible for the Company's fire emergency rescue and production emergency services, as well as disaster relief work outside the Company.

- Potential risks 1. During the flood season, the wharf may be hit by waves, the slope of the embankment facing the water may be damaged, the platform may be scoured and destroyed, and ships or floating objects in the Yangtze River may hit the embankment and cause other damages.
  - 2. The rainstorm may have a great impact on the safety of numerous underground pipe galleries, underground spaces for equipments, and electrical facilities in the plant area.
  - 3. Landslides may be caused by strong earthquakes and heavy rainfall.
- Emergency resources 1. The Company's existing emergency resources: Emergency rescue team, militia organisation, and existing emergency supplies.
  - 2. Nearby emergency resources: Chongqing Changshou District People's Hospital, Changshou District Marine Fire Rescue Centre, and local government.
- Invocation conditions If there is an emergency whose impact exceeds the control of the factory (department) after its occurrence, and needs to be controlled and handled by mobilising the resources and power of the entire company.

# SHARING: STAY TRUE TO THE ORIGINAL ASPIRATION OF SERVING THE COUNTRY

The enterprise belongs to society, and it is duty-bound to fulfil environmental and social responsibilities. Chongqing Iron & Steel is committed to pursuing win-win cooperation with partners, customers, employees, and communities, thereby contributing to industry development and giving back to society wholeheartedly. By establishing a responsible supply chain, providing considerate services to users, prioritising employee development, and contributing to local development, we are fulfilling our initial aspiration of serving the country through the iron and steel industry.

### (I) Care for Employees

- 1. Protecting employee rights and interests
  - > Equal employment

During this Reporting Period, the Company strictly follows the *Labour Law of the People's Republic of China*, the *Labour Contract Law of the People's Republic of China* and other laws and regulations. In accordance with the principle of equality and consensus, the Company signs labour contracts with employees to clarify the rights and obligations of both the employer and employees. We prohibit any form of discrimination, treat employees of different nationalities, races, genders, religious beliefs and cultural backgrounds in an equal manner, and protect and safeguard the legitimate rights and interests of every employee in accordance with the law.

There is no employment of child labour, forced labour, harassment and abuse in the Company during the Reporting Period. In the *Recruitment Management Measures* and the Labour Discipline Management Measures of the Company, it is clearly stipulated that the applicants must be at and above 18 years old and meet the national labour and employment policies. At the same time, the Company actively provides jobs for persons with disabilities, assisting them in enhancing their professional skills and realising their life's value.

Category	Name	No. of People	Proportion (%)
Gender structure	Male employees	4,964	83.9
	Female employees	951	16.1
Mix of educational	Doctoral degree	3	0.1
backgrounds	Master's degree	110	1.9
	Bachelor's degree	1,100	18.6
	Junior college degree	2,060	34.8
	Others	2,642	44.7
Persons with disabilities		51	0.86
Age	At and below 35	2,023	34.2
	Age 36–45	1,656	28
	Age 46–55	2,113	35.7
	Age 55–60	123	2.1

### Employee Composition of Chongqing Iron & Steel in 2023

### > Remuneration and benefits

In strict accordance with the salary and welfare policies of the national and local governments, the Company has established a remuneration and incentive mechanism and management system that is fair internally, competitive externally and aligned with the market. The Company determines the salary according to the position sequence, level and nature and other factors, and adheres that the salary varies with the position change.

We ensured employees' labour remuneration and social insurance benefits in accordance with the law. In addition to basic wages and bonuses, overtime pay, high-temperature allowances, subsidies for combat (nuclear-related) personnel, Muslim subsidies, and single-child allowances as per national regulations were promptly and fully distributed. The Company formulated Measures for the Administration of Employee Welfare Benefits to provide in-time birthday care, wedding greetings and funeral condolence, and other subsidies for employees. Achieving full coverage for every individual, this approach comprehensively inspired the vitality of employees, fully leveraging the role of performance orientation, and ensuring that employee income was aligned with individual performance and company operational performance.

### Democratic management

Efforts were made to enhance the quality of the Workers' Congress. Adhering to the basic form of democratic management represented by the Workers' Congress, five sessions of the Workers' (Members') Congress were convened, with 245 employee (member) representatives listening and reviewing the annual administrative work report, safety and environmental protection work report, and annual collective contracts.

Collective democratic negotiation was upheld. We used collective contract negotiation as a starting point, enriched its content and optimised negotiation paths, making sound procedures, standardised operations, full negotiation, and democratic processes important aspects of improving the quality and efficiency of collective negotiation.

We implemented the Workers' Congress Joint Meeting system. Any matters related to employee interests are strictly reviewed and approved by the Joint Meeting in accordance with prescribed procedures and confirmed at the Workers' Congress. In 2023, we held nine Joint Meetings, approving 18 regulations including the Implementation Measures for Training Rewards and Penalties; electing one worker representative to attend the second session of the China Baowu Workers' Congress; and electing two worker supervisors for the ninth session of the Company's Board of Supervisors.

We strengthened democratic supervision of labour protection. We formulated the *Management Measures for Representatives of Employee Occupational Health and Safety* and organised union labour safety protection supervision activities. We established a team of 108 "Safety and Health Representatives" among employees, identifying and rectifying 7,534 safety hazards in 2023 with a 100% rectification rate. We persisted in organising worker representatives to participate in safety committee meetings every quarter, where they received reports on safety production and proposed suggestions, effectively safeguarding the safety rights of employees.



Collective Contract Signing Ceremony and Workers' Congress

### Care for female employees

The Company provides special protection policies for pregnant and lactating women and other female employees. In the Labour Discipline Management Measures, it is clearly stipulated that female employees can enjoy maternity leave, birth control leave, nursing leave, rest and work leave and special menstrual leave in addition to marriage leave and paid annual leave, also a clause to protect the special rights and interests of female employees has been added in the collective contract, so as to effectively safeguard the legitimate rights and interests of female employees and care for female employees through practical actions.



Series of Activities on the International Women's Day on 8 March

### 2. Guaranteeing a smooth development channel

We implemented the *Management Measures for Reserve Talent Cultivation* and *Management Measures for the Selection of (Competing for) Managerial Positions and Technical Positions* at and below the Factory and Department Level, advancing talent team construction. We established a career development system with "three channels" for management, technical business, and operation and maintenance, used "six clear standards" as our work standard, and implemented three major talent projects of management personnel training program, experts training program and craftsmen training program, to broaden employees' career paths and growth paths, thereby stimulating the development vitality of the organization.

### The "Three Channels" Career Development System

### • The managerial sequence

Operation Officer Management/Office Director Management → Factory Management → Company Management.

### The technical business sequence

Technical Associate (Host Commissioner)  $\rightarrow$  Regional Engineer (Commissioner in charge)  $\rightarrow$  Chief Engineer (Chief Manager)  $\rightarrow$  Senior Director Engineer (Senior Manager)  $\rightarrow$  Chief Engineer (Chief Manager).

### The operation and maintenance sequence

General Operator (spot inspection and maintenance)  $\rightarrow$  Main Operator (spot inspection and maintenance)  $\rightarrow$  Senior Operator (spot inspection and maintenance)  $\rightarrow$  Chief Operator (spot inspection)  $\rightarrow$  Technology Specialist.

### Case: "Honour Day" Event

On 28 March 1958, the great leader Chairman Mao personally inspected Chongqing Iron & Steel, giving tremendous encouragement to the employees of Chongqing Iron & Steel. This day also became the "Honour Day" cherished by all Chongqing Iron & Steel employees. On 28 March 2023, the Company held the third mini-marathon competition, aiming to commemorate and inspire employees who have made outstanding contributions to the Company's reform and development by planting honour trees. The marathon spirit of never giving up was used to inspire employees to move forward bravely towards outperforming the market.



### > Paying attention to employee training

Chongqing Iron & Steel adhered to the strategy of strengthening the enterprise with talent, formulating annual training implementation plans in line with the high-quality development plan and the three-year capacity improvement goals for human resources. Through a combination of internal autonomous training and external training, we further strengthened the construction of three talent teams, promoting overall quality improvement for all employees.

Based on the Company's production and operation development and key work advancement requirements, with a focus on the development needs of management talents, technical business talents, and skill talents, we primarily conducted training in forms such as independent classes, benchmarking to identify areas for improvement, online training, special external training, mentorship programmes, and competitionbased training. A total of 46,926 person participated, with an average of 139.4 training hours per person. Training plan implementation rate, special operation certification, and skill level certification, among other training indicators, all achieved annual plan targets.

### Case 1: Shoulder Expectations, Build Dreams for the Future

To better integrate new college hires into the Chongqing Iron & Steel family, familiarise them with the Company's development history, process flow, and workplace life, and equip them with the necessary knowledge and skills for their positions to become strategic talents needed for the Company's development, from 25 July to 7 August, the Company organised a two-week orientation training for new college hires.



### Case 2: Empower Training, Promote Integration of Operation and Inspection

In 2023, the Company conducted three reviews of compliance requirements to enhance the "soft capacity" of technical personnel. A total of 2,919 people participated in specialised operation training, resulting in 1,327 new specialised operation certificates being issued. On average, each operational sequence staff member holds 0.97 specialised operation certificates, laying a solid foundation for operation, inspection, maintenance, and adjustment. Skill level training was provided to 1,470 individuals, with skill levels of 1,170 employees being elevated. The proportion of technicians and above increased from 6.6% at the end of 2022 to 14.8%.



### Case 3: Strengthen Foundation, Empower Growth! The Third Session of the "Middle and Young Talent Class" Begins

To further enhance the training of management talents, systematically advance the construction of management talent teams at all levels, optimise the team structure, and continuously cultivate a team of management talents who understand operations, excel in management, and are innovative, on June 29, 2023, the opening ceremony of the third session of the "Middle and Young Talent Class" was held in the academic lecture hall of the conference centre.



### > Conducting labour competitions

We adhered to the principle of "pursuing excellence and challenging new heights" in labour competitions, accurately identifying competition projects. At the company level, we defined 15 company-level special labour competition schemes, including innovation in all staff positions and improvement of production process indicators, totalling 54 sub-projects, stimulating employee creativity, with an expected annual output value of RMB213 million.

We hosted the Chongqing Iron & Steel Division Finals of the Central and Southern Steel First Workers' Skills Competition. 37 participants from Shaoguan Iron & Steel, Echeng Iron & Steel, and Chongqing Iron & Steel competed on the same stage, showcasing their styles and skills. Employees from the Company achieved three championships, two runners-up, and two third-place honours in the competition.



Labour Competition Award Ceremony

### 3. Paying attention to employee health

With great importance attached to the physical and mental health of employees, the Company faithfully implements the *Labour Law of the People's Republic of China,* the *Regulations on Work Injury Insurance,* and the *Law on Prevention and Treatment of Occupational Diseases.* We have put in place management systems including the *Occupational Health Management Measures* and the *Work Injury Management Measures,* improves the health service system, and builds a solid defence line for employees' occupational health.

(1) We implemented classified management and comprehensive governance of occupational health. We have established 12 occupational health management systems; implemented separate toxic and harmful operations and harmless operations in workplace layouts; conducted regular testing and evaluation of occupational disease hazards; strictly followed "three simultaneous" supervision and management regulations to pre-evaluate, design, review, inspect and accept new, renovated, and expanded projects; publicised relevant regulations and operational procedures for occupational disease prevention and control, and occupational disease hazard detection results, disclosed occupational hazard information during the signing of labour contracts; provided occupational health protection products in compliance with national occupational health standards, and organised training regularly.

During the Reporting Period, we conducted occupational health checks for 4,869 employees exposed to occupational hazards and conducted personal exposure dose monitoring for 49 employees in radiation-related positions, with no primary occupational diseases reported.

- (2) We signed service agreements with Chongqing Changshou District People's Hospital and Chongqing Iron & Steel General Hospital, and organised employees to undergo health checkups.
- (3) We paid attention to employees' mental health, and strengthened humanistic care and psychological counselling through heart-to-heart talks and organising psychological health lectures.


In November 2023, the Company held a health knowledge lecture at the Multifunctional Hall of the Leisure Park Cultural and Sports Building. Chen Wan, Director of the Cardiovascular Department and Deputy Chief Physician of Changshou District People's Hospital, and Fan Yuanming, Director and Chief Physician of the Thyroid and Breast Specialties, respectively, gave lectures on the causes, clinical manifestations, prevention measures, and other aspects of hypertension, thyroid, and breast tumours. The Company also arranged for interpretation of medical examination reports and provided health consultation services.

#### 4. Building a solid safety defence line

#### ➤ Safety management system

We strictly adhered to the principles of "safety first, prevention-oriented, and comprehensive governance", as well as the regulations of "joint responsibility of the Party and government, dual responsibilities of one position, joint management by all, and accountability for negligence". Upholding the safety concepts of "people-oriented, life-first" and "violation of regulations is a crime", we implemented the responsibilities of the safety production committee, company leaders and responsible persons, and functional business departments and production units.

During the Reporting Period, we revised and formulated 20 regulations and standards, compiled 122 safety production responsibility systems, signed 457 safety target responsibility agreements, prepared 6,124 job safety performance checklists and evaluation standards, and optimised 212 "two lists and two cards", realising a "comprehensive, three-dimensional, hierarchical" and "horizontal to the edge, vertical to the end, no omissions, full coverage" safety production responsibility system covering all employees. We promoted the standardisation of enterprise safety, with four secondary units meeting the requirements of secondary safety standardisation construction by the end of the Reporting Period, and one meeting the requirements of tertiary safety standardisation construction.

Item	Unit	2022	2023
Number of employee occupational fatalities	Case	0	0
Number of third-party occupational fatalities	Case	1	1
Employee occupational accident injury frequency	Number of injured person per million work hours	0	0
Third-party occupational accident injury frequency	Number of injured person per million work hours	0.2	0.04
Safety investment	RMB100 million	0.64	0.63

#### > Identification and rectification of safety hazards

During the Reporting Period, we identified 31,267 hazards in accordance with external compliance requirements and regulations such as the *Management Measures for Hazard Identification, Risk Evaluation and Control,* the *Management Standards for Hazard Identification and Evaluation.* This identification process involved considering factors such as job position equipment and facilities, process flows, and operational procedures. We formulated hierarchical and graded management measures for performing duty inspections, found and rectified 594 problems, ensuring clear identification of hazards, clear measures, responsibility in place, and controlled graded management

We strictly complied with national regulations such as the *Regulations on the Safety Management of Hazardous Chemicals* and the Company's *Measures for the Safety Management of Major Hazardous Sources of Hazardous Chemicals*. We equipped production, storage, and loading sites with safety equipment and facilities for hazardous chemicals, formulated 36 inspection standards for hazardous chemical storage and security, and regularly inspected and urged rectification. Operators of hazardous chemicals underwent training and qualification verification before assuming their positions. Third parties involved in the transportation of hazardous chemicals verified their qualifications, ensuring that the production and operation of hazardous chemicals are legal and compliant.

> Emergency management

During the Reporting Period, we completed the evaluation and revision of three plants' and two departments' emergency plans, conducted special training, and further improved the emergency plan system. We formulated and implemented 700 drill plans, with 9,563 personnel participating. We strengthened the construction of emergency rescue teams, organising the establishment of a company-specific gas emergency team of 52 people, a full-time fire brigade of 69 people, and a part-time fire brigade of 2,234 people. We conducted comprehensive emergency rescue drills in conjunction with the Changshou District Fire Rescue Detachment, organised special training for 3,171 emergency rescue team members, conducted emergency skills competitions, and enhanced employees' safety awareness and operational skills. We standardised emergency material management, cataloguing 2,324 sets of emergency materials and equipment, regularly updating and maintaining them to ensure they are "available, usable, and reliable".



Marine Damage Incident Emergency Drill



The Company's emergency rescue team participated in a large-scale urban comprehensive practical drill in Changshou District



Conducting emergency rescue drills for fire accidents in the plant area

#### Safety training

- (1) Through expert lectures, special seminars, hierarchical training, and the establishment of question banks, we conducted capacity-building training for more than 750,000 person, enhancing safety performance capabilities.
- (2) We conducted sensory training for 3,794 person; online accident visualisation training for 86,791 person, using "terrifying" accident education to raise employees' safety awareness and foster good operational habits.
- (3) We promoted activities such as "Employees Speak on Safety" and "Team Eight Steps" to facilitate grassroots autonomous safety management; we conducted "Mirror Observation of Violations" for 8,584 person, effectively correcting employees' violations.
- (4) Through behaviour observation, video playback, and quiz verification, we conducted safety training effectiveness verification for 17,416 people, improving the pertinence and applicability of training.



Safety Sensory Training Centre

#### Safety management for related parties

We strengthened interaction and liaison mechanisms with government departments and surrounding communities to promote safety management interaction. During the flood season in 2023, to ensure the safety of adjacent waters, we jointly held the annual terminal flood season safety work meeting with the Changshou District Maritime Affairs Bureau, the Port and Shipping Maritime Affairs Centre, MCC Baosteel, and 18 shipping companies, establishing a flood season safety control department linkage emergency mechanism. During Safety Month activities, we won the second prize in the 2023 Changshou Economic Development Zone Emergency Skills Competition.

We strengthened collaborative safety management, implementing the principles of "streamlining and standardising, equivalence, territorial management, and accountability". We implemented requirements such as "who contracts is responsible, who supervises, who uses, and who manages", "collaborative safety management is equivalent to safety management of this unit", and "business contracting units shall sign special safety production management agreements with contracting units", enhancing the safety awareness of collaborative employees. During the Reporting Period, we investigated and banned three collaborative units and 22 collaborative personnel with habitual violations.

#### 5. Create a happy life

➤ Enrich employees' life

Keeping in mind employees' aspirations for a better life, we continued to practise the "three havings" life philosophy of "having money, leisure and fun", enhancing employees' "sense of gaining, happiness and security". By the end of the Reporting Period, we had established 12 company-level cultural and sports associations, holding monthly cultural and sports activities that employees enjoyed, such as the "Soaring Cup" football match, "Casting Dream Cup" basketball match, "Welcome Cup" badminton match, "Dragon Gate Cup" fishing match, and Thursday "Movie Day". We have also set up facilities such as the Xiangtao Library, table tennis room, billiards room, chess and card room, yoga room, basketball court, football field, indoor badminton court, gym, and multi-function hall, providing a variety of cultural and sports activities for employees in their spare time.



Chinese New Year Annual Meeting Activity (Left), Yoga Class (Right)

#### > Employee assistance

We have established a "universal + precise" assistance system, expressing appreciation and blessings to employees during Labour Day, Dragon Boat Festival, Mid-Autumn Festival, New Year, and high-temperature periods, distributing gifts worth RMB5,094,000 to 38,906 employees. We have conducted condolences and financial aid for 56 difficult employees and labour models, distributing RMB112,000 in aid; and provided RMB488,800 in aid for hospitalisation expenses for 737 people. We continue to carry out the Autumn Assistance Programme; in 2023, the Company's trade union distributed RMB42,000 in educational assistance to 18 employees' children.

Addressing the "Three Most" issues facing employees, we continued to carry out the "Doing Practical Things for the People" activity in a layered and graded manner, forming 29 company-level "Doing Practical Things for the People" practical activity projects and 38 plant-level practical projects approved by the Company's party committee. We have completed all 67 practical projects, including the "Excellence Lecture Hall" activity, the installation of direct drinking water dispensers in the Leisure Park dormitory, the refurbishment of Leisure Park dormitory accommodation, meal points in various regions, and canteen upgrading renovations.



Express Appreciation and Blessings to Employees

#### (II) Partner Responsibility

#### 1. Supplier management

#### 1.1 Management documents

The Company's suppliers include raw fuel material suppliers, production and maintenance collaborative suppliers, construction project suppliers, spare parts suppliers, and professional service suppliers, etc. The Company has formulated management regulations such as *Raw Material Supplier Management Measures*, *Collaborative Supplier Management Measures*, and *Construction Project Supplier Management Measures*, which stipulate requirements for admission, daily management, evaluation, etc., and are incorporated into contracts.

#### 1.2 Operational mechanism

**Supplier admission:** Suppliers' qualifications, product and service quality, prices, comprehensive strength, and management system certifications were reviewed and evaluated. Those meeting the requirements became qualified suppliers.

**Supplier evaluation:** Suppliers were dynamically and annually evaluated, with evaluation dimensions including delivery of goods, price/cost, quality, service, technology, assets, commitment to compliance, management system certification, communication, and cooperation. We strengthened the application of evaluation results. For example, annual evaluations of raw material suppliers were graded A, B, C, D, E. Suppliers rated as Class A contributed to supplier level promotion, while those rated as Class D or E would lose their qualified supplier status.

We advanced two-way audit work to further understand internal management deficiencies and on-site management gaps of each supplier, formulated rectification measures, and collaborated with suppliers to implement improvements, thereby promoting their continuous enhancement. In 2023, a total of 23 suppliers were audited, driving partner responsibility.

**Supplier withdrawal:** Clear conditions for supplier withdrawal included failure to pass the Company's qualified supplier qualification review, significant delays in delivery affecting production, product quality issues or significant quality problems affecting company production, and becoming a prohibited supplier (blacklisted) by the Group or Company.

#### 1.3 Responsible supply chain

By conducting social responsibility training, education, cultural and sports activities, and research visits, the Company promoted the concept of social responsibility and jointly created a good supply chain "ecosystem".

In accordance with regulations such as the *Safety Production Responsibility Regulation*, *Dual Signing Management Measures for External Business Economic Contracts and Clean Agreements*, *Environmental Protection Management Measures*, and *Confidentiality Management Measures*, the Company conducted training and education on safety, energy conservation and environmental protection, integrity, and employee health and safety for suppliers, signing professional agreements on safety, integrity, and confidentiality, and making clear requirements.

We organised basketball, football, fishing matches, etc., invited suppliers within the plant area to participate; signed party-building co-construction agreements, carried out co-construction activities, promoted business with party building, strengthened party building with business, and created a harmonious working environment.

Every year, visits and communications are conducted with excellent suppliers and important suppliers, and in-depth communications and discussions are held on resource supply guarantee, expansion of goods or service categories, upstream and downstream industry coordinated development, and expansion of cooperation relationships, to achieve win-win development.



Secretary of the Party Committee and Chairman of the Board of Directors of China Coal Huali Energy Holdings Co., Ltd., Wang Xiaoming, and his delegation visited Chongqing Iron & Steel



Secretary of the Party Committee and Chairman of the Board of Directors of Shanxi Coking Coal Sales Co., Ltd., Xue Jun and his delegation visited Chongqing Iron & Steel



President of the Company and Deputy Secretary of the Party Committee, Meng Wenwang, led a team to visit Pingdingshan Coal Group



The Senior Vice President of the Company, Zhao Shiqing, led a team to visit Chongqing Iron & Steel Mining Industry

#### 2. Transparent procurement

To ensure the transparency and standardisation of procurement activities, while considering production needs, management regulations such as *Tender Invitation Management Measures, Inquiry and Comparison Purchasing Management Measures*, and *Raw Material Procurement Management Measures* have been formulated, clarifying procurement processes for different matters and projects of different amounts. We put forward and practised the tender invitation management requirements of "should invite, must invite, and invite as many as possible", implemented tender invitation work through the China Baowu unified tender invitation platform, and introduced information technology means to supervise the exercise of rights and avoid moral risks in transactions; no tender invitation violations occurred during the Reporting Period.

We continuously promoted online procurement of office supplies, maintenance and inspection material spare parts, and equipment, and implemented procurement through the China Baowu unified platform.

#### (III) Quality Service

#### 1. Strengthen quality responsibility

> Quality management system

Documents such as *Quality, Environment, Occupational Health and Safety*, and *Energy Management, Management Measures for Technical Standards, Management Measures for Product Quality, Management Measures for Nonconforming Products* have been formulated to regulate the quality management organisational structure and operational mechanisms, etc. Through series activities such as management system external audits, internal audits, special audits, process audits, quality spot checks, and process inspections, we ensured the effective operation of the quality management system, maintaining quality management system certification in 2023.

#### > Quality management measures

- (1) We adhered to the concept of quality first, implemented the requirements of the *Supervision and Management Regulations for Quality and Safety Responsibility of Industrial Product Manufacturing Units*, and implemented consistent management of raw fuel materials and alloying materials, consistent process quality management, and consistent product user management.
- (2) Through daily, weekly, and monthly control of products and system capability improvement, we made product quality management more standardised and scientific, ensuring the stable and controlled quality of company products and achieving certain results.
- (3) Focusing on users, we improved product quality and enhanced customer satisfaction through work such as process review, process optimisation, process improvement, product quality design, and customer visits; expanded the Company's product range through production, sales, and research, and new product development.
- (4) For products from network steel plants, the Company adhered to full-process management including rolling process, product quality inspection, physical and chemical performance testing, and comprehensive judgment by stationed personnel; the physical quality of network steel plant products remained steadily improved in 2023, with no complaints about quality defects throughout the year.

In 2023, government agencies conducted six supervisory inspections on hot-rolled steel bar products for reinforced concrete production by Chongqing Iron & Steel, and all inspection results were qualified.

> Product quality certification

In 2023, the Company obtained certification from Det Norske Veritas MSA, China Classification Society, and Lloyd's Register annual audit, with a product certification rate of 100%, and a visa of 169,100 tons for ship plate products.

In 2023, the Company's structural steel hot-rolled wide-thick steel plates for ships and offshore engineering, and structural steel hot-rolled wide-thick steel plates for bridges were awarded the title of "Golden Cup Quality Products" by the China Iron and Steel Association.

#### > Quality appraisal

In 2023, Chongqing Iron & Steel Testing Centre adhered to the principles of fairness, impartiality, standardisation, and accuracy, effectively controlling various management and testing processes, conscientiously completing testing tasks, ensuring the suitability, sufficiency, and effectiveness of the system, and consecutively obtaining accreditation from the China National Accreditation Service for Conformity Assessment for 15 years. It participated in eight capability verifications including chemical composition analysis of ferromanganese (international comparison), determination of TFe, SiO<sub>2</sub>, P, S content in iron ore (international comparison), tensile testing of hot-rolled ribbed steel bars (international comparison), and determination of decarburisation depth of steel (international comparison), all of which obtained satisfactory results.

#### 2. Intimate customer service

Service system

The Company advocated the concept of win-win value with customers, provided overall solutions around customer needs, and maximised customer value. Management systems such as the *Customer Maintenance Strategy Management Measures*, *Customer Satisfaction and Loyalty Evaluation Management Measures*, and the *Management Measures for Customer Interview (Visit)* have been formulated, specifying full-process, full-cycle, and full-lifecycle customer service systems for pre-sales, in-sales, and after-sales of products.

#### > Visit customers

We revised and optimised regulations and policies such as the *Management Measures* for *Customer Interview*, strengthened management of end-user visits, set a target of terminal visit proportion  $\geq$  75% in the evaluation index, and increased the proportion of end-user visits. We established and improved one table for one household, dynamically updated and tracked management of graded customers quarterly, continuously promoting high-quality and efficient visit work.

During the Reporting Period, a total of 2,135 customer visits were conducted, achieving an average of 178 visits per month, an increase of 27% compared to the average monthly visits in 2022; among them, there were 1,667 terminal visits, accounting for an average of 79% of terminal visits per month, an increase of 11 percentage points compared to the average terminal visits per month in 2022.

#### > After-sales services

Focusing on customers, and combined with graded customer management, a professional service team has been established for strategic customers and key customers to collect customer information anytime and anywhere and solve problems that may arise during the use of products in a timely manner. For complaints raised by customers in satisfaction surveys, they were reflected in the *Chongqing Iron & Steel Company Limited Customer Satisfaction and Loyalty Measurement Analysis Report*. The marketing centre tracked the implementation of rectification measures and provided feedback and follow-up visits to customers, managing customer feedback in a closed-loop manner.

Item	Unit	2021	2022	2023
No. of customer complaints accepted	Case	362	622	382
Customer complaint resolved rate	%	100	100	100
Customer satisfaction	%	88.79	86.12	91.39



Honoured as "Excellent Unit for Emergency Supply Assurance" by Shudao Group

Awarded the title of "Excellent Supplier" by China Railway Construction Corporation

#### > Responsible marketing

In 2023, a new marketing service capability improvement system was added to enhance customer service capabilities. Functions such as secondary distribution in internal/ external warehouses, warranties for loose-leaf products in external warehouses, strategic customer docking with China Construction Science and Industry, and establishment of standard interfaces for customer docking have all been launched online, and the system has been docked with six customers, meeting their transmission information needs.

We provided products and services in a transparent and user-informed manner. Steel products were accompanied by *Product Quality Certificates*, which included important information such as designation, furnace number, specifications, chemical composition, yield strength, etc. No incidents harming customer health and safety due to production and operation activities occurred during the Reporting Period.

We strictly controlled customer intellectual property rights and personal information and privacy protection. Customer-related information could only circulate within the smallest scope as needed for work in the Company, and could not be provided to third parties. No customer information security incidents occurred during the Reporting Period.

#### (IV) Industrial Development

The Company collaborated with multiple parties to deepen strategic cooperation and jointly promoted the construction of a high-quality steel industry ecosystem, while accelerating the construction of shared experimental bases and shared databases, building stable communication and exchange platforms, and promoting industry-university-research cooperation.

#### > Participating in industry standard formulation

The Company actively participated in industry communications and industry standard discussions, promoting the improvement of relevant industry standards and continuously enhancing the level of industry quality management. In 2023, we led the formulation or revision of two national standards, five industry standards, and one group standard, and completed the publication of four national standards, including the formulation of two new standards and the revision of two existing standards.

#### > Strategic cooperation

To deepen strategic cooperation between procurement and sales ends and jointly build a high-quality ecosystem, the Company conducts visits to important suppliers and customers every year, conducts communications on product technology, quality, logistics coordination, market synergy, etc., and promotes win-win cooperation.

"Network steel plants" are the development trend of the steel industry under the new situation, based on network information technology, promoting local government energy conservation, carbon reduction, intensive land use, urban solid waste absorption, and nearby market service; promoting cooperative steel plants to improve operational efficiency and competitiveness; promoting high-quality development of the steel industry in the region. During the Reporting Period, continuous technical support was provided to network steel plants to promote steady improvement in production technology and quality levels.

#### > Participate in important project construction

In 2023, Chongqing Iron & Steel actively promoted efficient production and the high-end, differentiated development of products, achieving new breakthroughs in serving major strategies such as the "Belt and Road" and promoting urban infrastructure construction.

- (1) Rogun Hydropower Station is the largest hydropower station in Tajikistan, with a designed capacity of 13.1 billion kilowatt-hours. Once completed, it will become the world's tallest dam. Chongqing Iron & Steel provided low-alloy high-strength structural steel for the project, which was delivered in August 2023.
- (2) Units 5 and 6 of Lufeng Nuclear Power Plant are located in Jieshiwan East Coast, Jieshi Town, Lufeng City, under the jurisdiction of Shanwei City, Guangdong Province. After the contract was signed, the Chongqing Iron & Steel production, sales, and research team carefully planned, and successfully passed the on-site quality system inspection by the owner in early June 2023. The materials are being supplied in an orderly manner, and the owner fully affirmed the stability and reliability of the product quality.
- (3) The Shuangbao Extra-Large Bridge has a double-arch span of 810 meters, making it the world's largest double-span continuous arch bridge under construction. In response to the steel plate delivery time requirements of the Shuangbao Extra-Large Bridge, Chongqing Iron & Steel ensured the timely completion of all materials within the contract delivery period, and the quality and efficiency were highly affirmed by the owner.
- (4) Chongqing East Station is located in the eastern part of the main urban area, in the southern area of the Caogu River, and is the largest grade-A high-speed railway station under construction in the country. The total demand for construction steel bars is about 580,000 tons. Chongqing Iron & Steel's steel supply volume accounts for 27% of the total demand for project construction during the period, of which 55% are 12-meter standard threaded steel bars.
- (5) The first phase of Chongqing Rail Transit Line 18 has a total length of 29 kilometres and 19 stations. Chongqing Iron & Steel, as the main steel supplier for Line 18 construction, supplied steel materials accounting for 63% of the total demand for project construction.
- (6) The EPC project of the Yangtze River Ecology and Environment Institute is an important embodiment of implementing Xi Jinping's ecological civilisation thought and a typical case of Chongqing's "joint protection, not large-scale development". The Company met the steel supply requirements of the project. After delivery completion, the punctuality and product quality were highly affirmed by the customer.

#### (V) Commitment to Society

#### 1. Serve local development

While promoting its own high-quality green development, Chongqing Iron & Steel also served local development through localised procurement, localised employment, assisting in selling agricultural products, green production, etc., to build a better life together. In 2023, 208 local suppliers cooperated with the Company, with a procurement amount of about RMB4.5 billion; the Company employed 21 local employees, accounting for 66% of the newly added employees; organised events such as the Spring Shopping Carnival, Chinese New Year Goods Trade Fair, and Agricultural Product Selling Assistance Fruit Trade Fair to provide sales platforms for local daily necessities, mobile communication equipment companies, and rural areas. A total of five sales events were organised in 2023, with sales of RMB403,700 and 5,364 participants.





Spring Shopping Carnival



Assist in Selling Agricultural Products



Donate to Tianxing Village

#### 2. Assist in rural revitalisation

The Company actively fulfilled its social responsibilities and participated in social welfare undertakings. The completed external donation amount was RMB600,000, an increase of RMB420,000 from 2022, of which RMB500,000 was donated to Tianxing Village, which is in Jiangnan Street, Changshou District, Chongqing City; and RMB100,000 was donated to the Chongqing Education Foundation, earmarked for the "Information Classroom" multimedia teaching equipment project for schools in rural revitalisation districts and counties.

Supporting China Baowu's assistance to Guangnan County, Yunnan Province, in rural revitalisation efforts, the Company purchased fragrant rice, rapeseed oil, black fungus, and tea tree mushrooms as gifts for employees during the May Day and Mid-Autumn Festival holidays in 2023, with a total procurement amount of RMB2.644 million.

#### 3. Promote public welfare activities

Since 1 June 2018, Chongqing Iron & Steel has officially registered and established a Youth Volunteer Service Team and simultaneously established *Chongqing Iron & Steel Youth Volunteer Service Work Regulations*. Focusing on serving others, serving enterprises, and serving society, the Company fulfilled social responsibilities, shaped the excellent personality of young employees, and demonstrated a good corporate image and social influence. In 2023, a total of 30 company-level voluntary service activities such as caring for the elderly, environmental protection, and energy conservation were carried out, totalling 1,928 hours.

#### Case: Youth Empowerment: Saving a Million Kilowatts

On 26 July 2023, the Communist Youth League Committees of Chongqing Iron and Steel, Changshou District State-owned Assets Committee, Construction Bank Changshou Branch, and State Grid Changshou Power Supply Company jointly launched the "Youth Empowerment: Saving a Million Kilowatts" special campaign and youth league building activities. Over 30 young volunteers went to communities and shopping malls to explain the policy of time-of use electricity rates and promote knowledge of safe electricity usage to residents. During the event, the participating parties signed a cooperative agreement for youth league building, leading to the establishment of the "Green Orange" Youth Volunteer Service Team.



### OUTLOOK

As international and domestic regulations regarding ESG management become increasingly comprehensive and explicit, Chongqing Iron & Steel, as a traditional manufacturing enterprise, faces stringent external regulatory requirements and challenges from industry cycles. However, we believe that "the road ahead is long and arduous, yet with persistence, success is assured". Despite the turbulence in the market and the gap of ESG management between us and other outstanding enterprises, we are united in purpose, inward-looking, actively changing our mindset, taking responsibility, and implementing transformative initiatives with determination and vigour, leaving indelible marks with every step. We will adhere to the direction of "advancing towards high-end, upgrading towards intelligence, transforming towards green, and developing towards efficiency", and follow the business principles of "production with orders, output with margins, revenue with profits, and profits with cash", focusing on value creation, inheriting the national steel industry's heritage, and creating a green and beautiful life.

### **APPENDIX**

#### (I) Key Performance Indicators (KPI)

Indicator	Unit	2023	2022	2021
Operating income	RMB100 million	393.18	365.62	398.49
Total profit	RMB100 million	-17.44	-12.02	22.63
Net profit	RMB100 million	-15.11	-10.19	22.74
Total taxes	RMB100 million	4.27	5.47	2.82
Steel production	10,000 tons	711.55	787.35	711.55
Operating profit margin (operating profit/net revenue)	%	-4.49	-3.19	6.18
Revenue growth rate	%	7.54	-8.25	62.72
Current ratio	%	43.65	65.18	86.63
(current assets/current liabilities)				
Employee education expenditure	RMB'0,000	1,178.47	349.32	259.77
A-share market value	RMB100 million	116.49	132.41	175.15
H-share market value	RMB100 million	3.93	4.52	6.89
Number of directors	Person	9	9	9
Number of independent directors	Person	3	3	3
Proportion of female directors	%	0	0	0
Interval days between annual shareholders' meeting	Day	29	29	34
Investor relations communication activities	Times	9	3	3
Number of confirmed employee corruption cases	Case	0	0	0
Coverage rate of anti-corruption training for directors	%	100	100	100

Indicator	Unit	2023	2022	2021
Number of employees participating in	Person	710	280	110
anti-corruption training Numbers				
Number of employees punished or	Person	7	5	24
dismissed for violating anti-corruption policy				
Cost of fines, penalties, or settlements related to corruption <sup>1</sup>	RMB'0,000	168.82	8.69	28.66
Compliance training sessions	Times	25	18	15
Number of participants in compliance training	Person-time	5,733	86	,
ESG professional training sessions	Times	3	1	1
Number of participants in ESG professional training	Person-time	16	15	18
Duration of ESG special training	Hour	96	30	36
Number of information security incidents <sup>2</sup>	Case	0	0	(
R&D investment	RMB100 million	14.54	13.56	12.56
R&D investment as a percentage of revenue	%	3.70	3.72	3.15
Proportion of R&D personnel	%	17.33	13.23	12.80
YoY growth rate of R&D expenses	%	29.01	109.81	
Annual number of patents applied	Item	517	392	274
Annual number of invention patents applied	Item	439	270	104
Annual total number of new authorised patents	Item	109	222	97
Annual number of new authorised invention patents	Item	38	17	;
Total number of customers	/	298	242	235
Number of customers in Eastern China	/	63	55	54
Number of customers in Southern China	/	18	14	13
Number of customers in Northern China	/	8	8	6
Number of customers in Southwest China	/	206	165	148
Number of customers in other regions	/	0	0	14
Number of overseas customers	/	3	0	(
Product factory inspection pass rate	%	100	100	100
Rate of products sold or delivered requiring recall due to safety or health reasons	%	0	0	1
Number of customer complaints	Case	382	622	36
Customer complaint resolution rate	%	100	100	100
Customer satisfaction rate	%	91.39	86.12	88.79
Total number of suppliers <sup>3</sup>	1	494	262	259

Indicator	Unit	2023	2022	2021
Number of domestic suppliers	/	487	259	254
Number of foreign suppliers	/	7	3	5
Number of suppliers reviewed by the	/	23	14	15
Company during the Reporting Period	0/	05.44	1	1
Proportion of suppliers participating in ESG training	%	95.14	1	1
Proportion of procurement from local suppliers	%	42.10	/	/
Total number of employees	Person	5,915	6,215	6,734
Total number of male employees	Person	4,964	5,188	5,580
Total number of female employees	Person	951	1,027	1,154
Total number of full-time employees	Person	5,915	6,215	6,734
Total number of part-time employees	Person	0	0	0
Number of employees at or below 35	Person	2,023	2,332	2,878
Number of employees aged 36 to 40	Person	1,219	1,036	736
Number of employees aged 41 to 50	Person	1,461	1,643	2,025
Number of employees aged 51 to 60	Person	1,212	1,204	1,095
Number of registered employees within the province	Person	5,654	5,568	6,040
Number of registered employees outside the province	Person	261	647	694
Proportion of employees with disabilities	%	0.86	0.69	0.59
Number of newly employed individuals during the Reporting Period	Person	32	25	239
Employment contract signing rate	%	100	100	100
Proportion of female managers	%	11.10	10.70	9.80
Average number of paid leave days per	Day	11.50	10.78	10.96
person per year			07 701 07	01 007 50
Total amount of paid social insurance	RMB'0,000	25,955.30	27,731.27	21,867.56
Management compensation/	%	0.64	0.97	1.61
total employee compensation	0/	100	100	100
Employee social insurance coverage	%	100	100	100
Employee checkup coverage rate	% DMD20.000	100	100	100
Total expenditure on employee training	RMB'0,000	1,351.55	414.80	586
Total number of employees participating in training	Person-time	41,083	49,814	48,764
Proportion of employees participating in training	%	100	100	100
Number of male employees participating in training	Person	4,964	5,188	5,580
Proportion of male employees participating in training	%	100	100	100

Indicator	Unit	2023	2022	2021
Average training hours per male employee	Hour	153	102	86.24
Number of female employees participating	Person	951	1,027	1,154
in training				
Proportion of female employees	%	100	100	100
participating in training				
Average training hours per female employee	Hour	155	95.20	86.30
Number of management employees participating in training	Person	261	271	276
Proportion of management employees	%	100	100	100
participating in training	Hour	100.20	105	4 4 4
Average training hours per management employee	Hour	192.30	125	111
Number of technical business employees participating in training	Person	881	904	961
Proportion of technical business employees participating in training	%	100	100	100
Average training hours per technical business employee	Hour	163.70	104	109
Number of operation and maintenance employees participating in training	Person	4,773	5,040	5,497
Proportion of operation and maintenance	%	100	100	100
employees participating in training				
Average training hours per operation and maintenance employee	Hour	115.50	99	81
Employee turnover rate	%	0.88	0.93	0.94
Turnover rate of male employees	%	0.61	1.07	0.91
Turnover rate of female employees	%	0.27	0.27	1.04
Turnover rate of employees aged below 30	%	0.37	0.40	0.40
Turnover rate of employees aged 30 to 40	%	0.37	0.20	0.28
Turnover rate of employees aged 41 to 50	%	0.08	0.10	0.12
Turnover rate of employees aged over 50	%	0.06	0.05	0.13
Turnover rate of registered employees within the province	%	0.63	0.06	0.84
Turnover rate of registered employees	%	0.26	1.82	1.73
outside the province		0.00	0.04	0.45
Investing in production safety	RMB100 million	0.63	0.64	0.15
Number of production safety training	Session	34,188	27,632	5,319
Number of participants of production safety training	Person-time	731,899	382,196	97,586
Total training hours of production safety	Hour	32,546	16,532	7,375

Indicator	Unit	2023	2022	2021
Production safety training coverage rate	%	100	100	100
Number of occupational disease	Times	0	0	0
occurrences				
Number of employee occupational	/	0	0	0
fatalities				
Number of severe accidents involving	/	0	1	1
employees				
Number of employees with severe injuries	Person	0	1	2
Number of employees with minor injuries	Person	0	2	1
Injury rate per thousand people	%	0	0.46	0.46
Number of accidents with third-party	/	1	1	3
occupational fatalities				
Number of third-party occupational	Person	1	1	3
fatalities				
Lost days due to work injury	Day	6,000	6,780	18,430
Certified employment rate of special	%	100	100	100
operation				
ISO 45001 certification coverage rate	%	100	100	100
Total investment in environmental	RMB'0,000	149,788	156,082	159,169
protection				
Greening rate of the plant area	%	35.50	35.20	32.00
Environmental impact assessment rate	%	100	100	100
Number of environmental pollution	Times	0	0	0
accidents				
Number of environmental penalties	Times	1	0	0
Total emissions of carbon dioxide⁵	ton	15,822,662	13,434,587	13,446,535
Emissions of carbon dioxide (Scope 1)	ton	15,416,869	12,901,331	12,912,804.75
Emissions of carbon dioxide (Scope 2)	ton	405,793	533,256	533,730.25
Emissions of carbon dioxide per ton of	ton	1.504	1.578	1.576
steel <sup>6</sup>				
Emissions of carbon dioxide per ton of	ton	1.465	1.516	1.514
steel (Scope 1)				
Emissions of carbon dioxide per ton of	ton	0.039	0.063	0.063
steel (Scope 2)				
Total emissions of sulphur dioxide	ton	2,759	2,948	4,443
Emissions of sulphur dioxide per ton of	kg	0.27	0.35	0.52
steel				
Total emissions of nitric oxides	ton	5,792	7,817	7,282
Emissions of nitric oxides per ton of steel	kg	0.56	0.92	0.85
Total particulate emissions	ton	5,600	5,250	9,000
Particulate emissions per ton of steel	kg	0.53	0.62	1.05
Total raw coal consumption	10,000 tons	178.90	152.37	150.55

Indicator	Unit	2023	2022	2021
Total cleaned coal consumption	10,000 tons	441.78	412.95	394.57
Total coke consumption	10,000 tons	337.15	312.90	320.07
Total power consumption	100 million kWh	37.95	21.40	29.60
Aggregate natural gas consumption	10,000 cubic meters	1,258.82	1,435.42	697.24
Renewable energy consumption (clean energy consumption) <sup>7</sup>	100 million kWh	17.08	9.63	13.32
Comprehensive energy consumption	Ten thousand tons of standard coal	608.68	529.05	468.03
	(equivalent unit value	)		
Comprehensive energy consumption per ton of steel	kg standard coal/ton	512.95	533.10	547.68
Aggregate hazardous waste generation	ton	145,440.06	141,841.83	140,228.47
Aggregate hazardous waste density	kg/ton	13.80	16.88	16.51
Aggregate hazardous waste standardised management qualified rate	%	100	100	100
Usage and disposal amount of hazardous waste	ton	144,171.83	141,971.34	140,228.47
Safety disposal rate of hazardous waste	%	100	100	100
Non-hazardous waste generation	ton	6,223,691.17	5,018,622.48	4,391,264.55
Non-hazardous waste generation density	kg/ton	590.52	589.00	516.87
Hazardous waste generation	ton	145,440.06	141,841.83	140,228.47
Hazardous waste generation density	kg/ton	13.80	16.88	16.51
Aggregate solid waste generation	10,000 tons	622.37	501.86	439.13
Aggregate solid waste usage	10,000 tons	622.37	501.46	438.59
Aggregate solid waste usage rate	%	100	99.92	99.88
Aggregate recyclable waste generation	10,000 tons	622.37	501.34	438.59
Aggregate non-recyclable waste generation	10,000 tons	0	0.39	0.54
Total water intake volume	10,000 tons	4,584.02	3,523.45	3,555.82
Total drainage volume	10,000 tons	735.00	767.75	865.00
Total annual new water consumption (fresh water consumption)	10,000 tons	4,584.02	3,523.45	3,555.82
New water consumption per ton of steel	m³/ton	2.66	2.83	3.30
Total water conservation	10,000 tons	1,197	152	160
Total wastewater discharge	10,000 tons	735.00	767.75	865.00
Total amount of industrial water reuse (recycled water)	10,000 cubic meters	170,402.73	157,101.63	155,222.34
Industrial water reuse rate	%	97.38	98.10	98.32
Total chemical oxygen demand (COD) emissions	ton	109.60	155.00	167.00

Indicator	Unit	2023	2022	2021
Chemical oxygen demand (COD)	kg	0.01	0.02	0.02
emissions per ton of steel				
Total ammonia nitrogen emissions	ton	8.30	11.68	17.42
Ammonia nitrogen emissions per ton of	kg	0.0008	0.0013	0.0020
steel				
Certification of environmental	%	100	100	100
management systems (ISO 14001)				
coverage rate				
Environment training participants <sup>8</sup>	Person-time	5,915	6,215	6,734
Environment training hours	Hour	35,490	31,075	33,670
Total external donations	RMB'0,000	60	18	34.24
Amount spent on purchasing agricultural	RMB'0,000	264.40	258.50	77
products from poverty-stricken areas				
Number of employee volunteers	Person	623	232	0
Total duration of annual volunteer	Hour	1,928	11,000	0
activities				
Participants in volunteer activities	Person-time	486	1,275	0

Note 1:The statistical data includes the gifts and illicit gains confiscated by the Company's<br/>Discipline Inspection and Supervision Department, as well as economic assessments.

*Note 2*: This indicator refers to information security incidents at Level 3 or above. According to the Company's emergency plan definition, information security incidents at Level 3 or above will have an impact on the public environment.

*Note 3, Note 4:* The statistical scope for 2023 includes all suppliers, while the statistical scope for 2021 and 2022 includes raw material suppliers.

*Note 5, Note 6:* Professional institutions designated by the Chongqing Municipal Ecology and Environment Bureau have verified the Company's carbon emissions data for 2021 and 2022, and corrections have been made based on the verification results; the data for 2023 are estimated values, and verification is expected to be completed in 2024.

*Note 7:* The data represents the Company's self-generated electricity using waste heat and excess pressure in the production process, thereby reducing the consumption of fossil fuels. Corrections have been made to the data for 2021 and 2022.

*Note 8:* The adjusted calculation method is based on the number of people multiplied by the hours per person, with corrections made to the data for 2021–2022.

(ii) Indicator index

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#### (III) Feedback

#### Dear Reader,

Hello! Thank you very much for taking the time to read the 2023 Environmental, Social and Governance Report of Chongqing Iron & Steel Company Limited! In order to continuously improve our ESG reporting management, we especially hope to hear your opinions and suggestions. Please assist us in completing the relevant questions in the feedback form below and choose one of the following methods to provide feedback to us:

Chongqing Iron & Steel Company Limited Board Secretariat No. 2 Jiangnan Avenue, Jiangnan Street, Changshou District, Chongqing, China, Postal Code: 401258 Telephone: 86-23-68983482 Fax: 86-23-68873189 Email: ir_601005@baowugroup.com Website: http://www.cqgt.cn				
Your information				
Name:	Telephone:			
Company:	Email:			
Multiple choice questions (Please mark '	<ul><li>✓ on the corresponding option)</li></ul>			
	important and substantive ESG matters related to			
Chongqing Iron & Steel in this report				
□ Very Good □ Good □ Fair □				
2. Please evaluate the responsiveness this report:	and disclosure of issues of concern to stakeholders in			
🗆 Very Good 🗆 Good 🗆 Fair 🗆	Poor 🗆 Very Poor			
-	, and completeness of the information, indicators, and			
data disclosure in this report:				
🗆 Very Good 🛛 Good 🛛 Fair 🗌	Poor 🛛 Very Poor			
4. Please evaluate the readability of this	s report:			
🗆 Very Good 🛛 Good 🗆 Fair 🗌	Poor 🗆 Very Poor			
	evaluation of the 2023 Environmental, Social and			
Governance Report of Chongqing Irc				
🗆 Very Good 🛛 Good 🖓 Fair 🗌	Poor U Very Poor			
Open-ended questions				
open ended questions				

- 1. What suggestions do you have for the ESG work of Chongqing Iron & Steel?
- 2. What shortcomings do you think exist in this report?
- 3. What valuable ESG information do you think this report provides for you?
- 4. What additional ESG information do you think should be disclosed in this report?