



中國大冶有色金屬礦業有限公司

China Daye Non-Ferrous Metals Mining Limited

(Incorporated in Bermuda with limited liability)

Stock Code : 00661

**ENVIRONMENTAL, SOCIAL
AND GOVERNANCE REPORT**

2024



Contents

Introduction	2
The Scope of and The Period Covered by this Report	2
Stakeholder Engagement	2
Environmental, Social and Governance Issue ("ESG") is a Board Responsibility	2
Environment	7
1. Environmental Protection	7
2. Use of Resources	12
3. Climate Change	14
Social	20
1. Safety Development	20
2. Employment Relationship and Labor Standards	23
3. Supply Chain Management	25
4. Product Responsibility	28
5. Anti-corruption	30
6. Community Investment	30
Environmental, Social and Governance Reporting Guide Index	35



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

INTRODUCTION

In 2024, China Daye Non-ferrous Metals Mining Limited (the “Company”) and its subsidiaries (collectively the “Group”) upheld its belief that economic development should go hand in hand with environmental protection and focused on its objectives and strengthened its problem-oriented approach in accordance with its environmental policy of “compliance with laws and regulations, green development, energy conservation and emission reduction and clean production”, with the aim of making continuous improvement and opening a new stage for the Company’s efforts in the ecological environment protection.

This environmental, social and governance report (“this report”) is prepared by the Group in accordance with the Environmental, Social and Governance Reporting Guide set out in Appendix C2 to the Rules Governing the Listing of Securities on the Main Board of The Stock Exchange of Hong Kong Limited.

THE SCOPE OF AND THE PERIOD COVERED BY THIS REPORT

Unless otherwise stated, this report consists mainly of the relevant operational information of two subsidiaries of the Company, namely Daye Non-ferrous Metals Co., Ltd. (大冶有色金屬有限責任公司) (“Daye Metal”) along with its subsidiary Yangxin Yangxin Hongsheng Company Limited* (陽新弘盛銅業有限公司) (“Yangxin Hongsheng”), and Xinjiang Hui Xiang Yong Jin Mining Co., Ltd. (新疆匯祥永金礦業有限公司) (“Xinjiang Hui Xiang Yong Jin”), during the Reporting Period. This report covers the period from 1 January 2024 to 31 December 2024 (the “Reporting Period”).

STAKEHOLDER ENGAGEMENT

Stakeholders refer to the parties that have interests in the Group or would be affected by the decisions and activities of the Group, including our shareholders, employees, suppliers, customers, regulators and the public. Stakeholders have participated in the assessment of materiality by way of face-to-face interviews, annual general meetings, telephone interviews, questionnaires, etc.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE ISSUE (“ESG”) IS A BOARD RESPONSIBILITY

The Board is responsible among other things for the development of the Group’s long-term corporate strategies and broad policies. In setting its standards, it considers the needs and requirements of the business, its stakeholders, the Corporate Governance Code and ESG Reporting Guide encompassed in the Stock Exchange’s Rules governing the listing of securities.

As such, the Board has overall responsibility for, and is engaged in, the Group’s ESG strategy and reporting, including identifying, evaluating and managing ESG-related risks, and ensuring appropriate and effective ESG risk management are in place. Management provides confirmation to the Board of the effectiveness of these systems. The Board also reviews progress made against ESG-related goals and targets.

Main Responsibilities of the Board

1. Oversee and execute the Group’s ESG strategy.
2. Review and ensure proper disclosure and compliance with the ESG Guide of The Stock Exchange of Hong Kong Limited.
3. Review the annual materiality assessment of ESG risks.
4. Review the internal procedures and system for the maintenance and generation of appropriate and accurate KPI data.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

The Group has established an ESG taskforce (the “Taskforce”). The Taskforce comprises of core members from the Groups’ different departments and is responsible for collecting relevant policies and information on its ESG aspects for preparing this report. The enterprise development department is responsible for the overall planning, with the guidance from the company secretary, and the members come from the safety and environmental supervision and management department, the production technology department, the human resources department, the quality accounting center, labor union, the disciplinary committee and Daye International Trade, a subsidiary of the parent company.

The Taskforce will report to the Board at least once a year and is responsible for reviewing, assessing and enhancing the Group’s ESG policies, strategies and performance, and ensuring the Group is in full compliance with ESG requirements. The Taskforce also examines and evaluates the Group’s performances in different areas such as environment, safety production, labor standards, and product responsibilities in the ESG aspects. The Board has also set up a general direction for the Group’s ESG strategies, ensuring the effectiveness in the control of ESG risks and internal control mechanism. This approach affirms and enables the Group’s commitment to ESG, and ensures that members with different backgrounds and expertise are represented to deliver meaningful outcomes.

Main Responsibilities of the Taskforce

1. Collect relevant policies and information for preparing this report.
2. Present and regularly report to the Board on ESG performance.
3. Make recommendations to enhance ESG strategies and practices.

Principles for ESG Disclosures

The Company believes that quality reporting in terms of accuracy, balance, clarity, comparability, reliability and timeliness is the key to managing corporate sustainability. As a result, the Group defines the ESG content to be disclosed in this report based on the following principles:

Materiality	The Company conducts annual materiality assessments to ensure that the identified and prioritized ESG issues reliably reflect the most material concerns to the Company and its stakeholders.
Quantitative	The Company strives to quantify data with the most accurate and precise standards, methodologies and assumptions possible for ease of comparing ESG performances.
Consistency	The Company consistently compiles its latest sustainability report in a familiar format as our past reports and publishes it in a timely manner for readers to make meaningful comparisons of the ESG performance of the Company before making any ESG-dependent decisions within the expected timeframe.
Stakeholder Inclusiveness	The Company engages a broad range of stakeholders to pinpoint the most material issues. Stakeholder groups include investors, shareholders, governments, customers, employees, villagers, local communities, business partners, suppliers and non-governmental organizations.
Sustainability Context	The Company aims to expand our coverage on sustainable development goals, climate risks and opportunities, and other ESG topics in our sustainability reports to provide clarity on the ESG efforts of the Company in a greater context.
Completeness	The Company discloses both the positive and negative impacts of our business in a transparent manner to give a more balanced and complete overview of the ESG performance of the Company.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Data Source and Reliability Statement

Data and cases in this report are primarily extracted from the official documents, statistical reports, relevant public information and internal reporting documents of the Group. The Company undertakes that this report contains no false representations or misleading statements, and assumes responsibility for the truthfulness, accuracy and completeness of its contents.

Goal Setting and Progress Review

The working group has set ESG-related goals and corresponding implementation initiatives, which are reviewed by the working group and submitted to the Board for approval, covering key ESG performance indicators such as discharge of pollutants, greenhouse gas emissions, resource consumption, production safety, quality management, etc. The Board regularly reviews the progress of achieving the ESG goals and makes recommendations for action on items that require improvement.

Communication with Stakeholders

Based on feedbacks from the stakeholders, the Company establishes a regular stakeholder communication practice. With targeted and diverse communication channels, the Company hopes to achieve positive interactions with stakeholders and respond to their expectations, thus facilitating the implementation of the Company's sustainable development efforts.

Stakeholders	Communication feedbacks	Communication channels
Government departments	<ul style="list-style-type: none"> Comply with relevant laws and regulations Safety Cooperate with the regulatory work of the government in support of healthy industrial development Ensure tax compliance and promote local economic development 	<ul style="list-style-type: none"> Meetings between government and company Supervision and inspection Work reports and studies
Shareholders and investors	<ul style="list-style-type: none"> Protect the legitimate rights and interests of shareholders Understand the operating results, governance standards and stringent risk control measures of the Company Ensure steady operation to maximize investment return Facilitate open, fair and equal information disclosure 	<ul style="list-style-type: none"> General meetings Company website Investor communication conferences and on-site visits Timely disclosure of material operating information and extraordinary announcements, and regular updates on financial information Face-to-face interviews, telephone enquiries and emails
Employees	<ul style="list-style-type: none"> Safeguard the basic rights and interests of employees Care for employees' physical and mental wellbeing and safety Understand employees' needs and their suggestions Provide training and career development platform for employees 	<ul style="list-style-type: none"> Employee representative meeting and labor union Employee satisfaction survey Occupational health and safety training Opinion and feedback platform Daily communication

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Stakeholders	Communication feedbacks	Communication channels
Customers	<ul style="list-style-type: none"> Protect customers' rights and interests Uphold business ethics Ensure product quality and safety, timely recall of defective products Provide high-quality after-sales service guarantee 	<ul style="list-style-type: none"> Product labelling and information disclosure Customer visits Customer satisfaction survey Address complaints and opinions from customers
Partners and suppliers	<ul style="list-style-type: none"> Maintain good and stable cooperation relationship Operate with integrity and ensure the products are compliant with the standards Timely communication and coordination with upstream and downstream players to achieve mutual benefits 	<ul style="list-style-type: none"> Regular exchange and communication Working meetings, phone calls and correspondences
Peers in the industry	<ul style="list-style-type: none"> Fair competition among peers to promote healthy industrial development Sharing of technology and experience among enterprises 	<ul style="list-style-type: none"> Meetings of industry organizations Experience sharing sessions On-site visits and exchanges
Local community	<ul style="list-style-type: none"> Take into account the impact of manufacturing and operation on local community Drive local economic development, provide assistance to the disadvantaged groups Promote health education and help patients Enhance recycling of product packaging and waste, etc. to reduce environmental pollution 	<ul style="list-style-type: none"> Participate in social welfare events Provide regular assistance to the local community Organize volunteer service Disclose environmental information

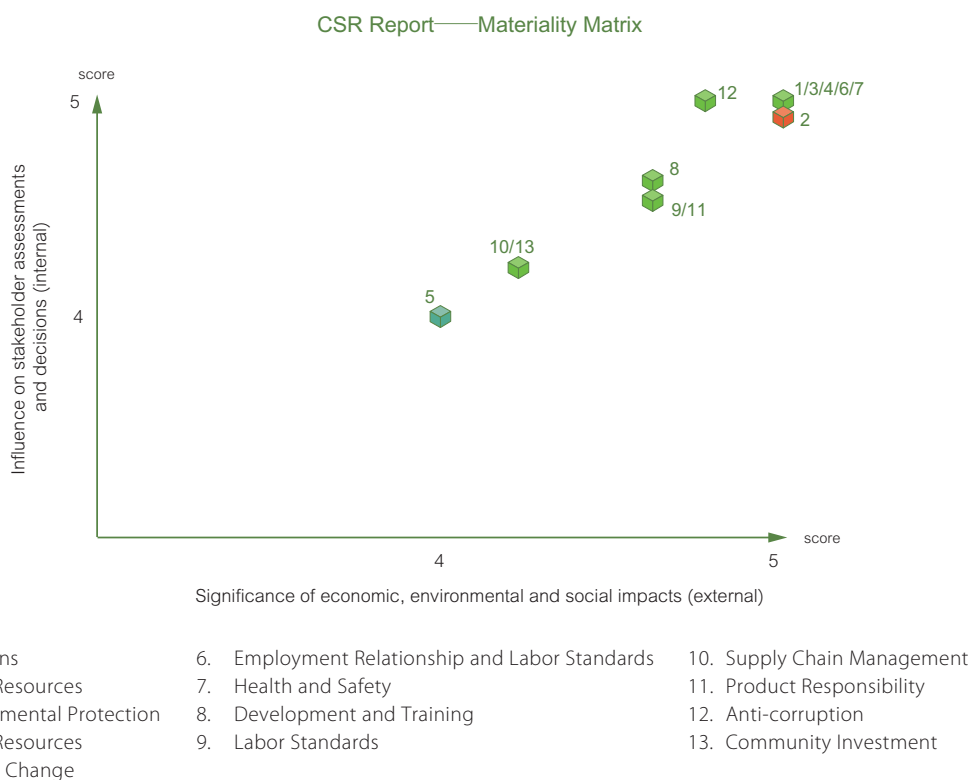
Materiality Assessment

The Company has reviewed and assessed the ESG issues for the year and summarized the key ESG issues of the Company from the stakeholders' perspective as the basis for the preparation of this report.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Materiality assessment process

- Review the pool of ESG issues: comprehensively consider and select the pool of ESG issues for 2024 by taking into account of the overall business development of the Group in 2024 and with reference to the ESG management practices of peer companies;
- Formulate and implement the stakeholder engagement program: communicate and research with important stakeholders to obtain relevant original data by taking into account of the Company's own situation for the Reporting Period and with reference to industry development and overall economic and social development;
- Quantify and evaluate from two dimensions: evaluate each issue from two dimensions of "materiality to corporate development" and "materiality to stakeholders" to obtain a matrix of material issues. The Company conducted a questionnaires survey in February 2025, inviting various categories of stakeholders to rate the materiality of ESG issues in 2024 on a scale of 1 to 5, in ascending order of materiality. After the survey, the Company analyzed and assessed the materiality of each issue from the two dimensions of "materiality to corporate development" and "materiality to stakeholders" based on the feedbacks from all participants, to arrive at the materiality matrix of ESG issues in 2024 and the rating of each issue. The survey covered a wide range of stakeholders, including directors, senior management, middle management, employees, investors, suppliers, distributors of the Company and government regulators;
- The working group submit the report to and obtain approval from the management: submit the assessment report on stakeholder engagement and material issues to, and obtain approval from, the management. The Company is fully aware of the high level of stakeholder interest in key issues in areas, and that proper management of these issues will be a top priority for the Group. This report will provide responses and disclosures on various material issues, with a focus on high-materiality issues. The findings of the materiality assessment will be used to guide future ESG strategies and practices to drive the sustainable development.



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

The materiality assessment result

The materiality assessment result indicated that the five most material topics to the Group are:-

Emissions
Environmental Protection
Use of Resources
Employment Relationship and Labor Standards
Health and Safety

ENVIRONMENT

1. Environmental Protection

The Group painstakingly placed the development of ecological civilization in a prominent strategic position. With rigid adherence to its environmental policy of “compliance with laws and regulations, green development, energy conservation, emission reduction and clean production”, the Group stringently implemented national environmental protection laws and regulations, technical specifications and emission standards while continuously promoting clean production and the operation of the environmental management system as part of its efforts to fulfil its social and environmental responsibilities, with the aim of achieving green development. The Group did not incur any ordinary environmental incidents during the Reporting Period.

1.1 Environmental Management

The Group constantly improves its environmental management mechanism by establishing a safe environmental supervision and management department, a specialized function for environmental management responsible for the organization, supervision, inspection and coordination of the Company's daily environmental management efforts, as well as the environmental protection offices, which are responsible for environmental management during the production process. The Group standardized its daily management of environmental protection through the establishment of a series of environmental protection management regulations such as the Environmental Protection Management (《環境保護管理》), Environmental Responsibility System (《環保責任制》), Solid Waste Management (《固體廢物管理》), “Environmental Statistics and Information Reporting System (《環境統計及信息報送制度》)”. Sign the “Safety and Environmental Protection Responsibility Letter” (《安全環保責任書》) at various levels, refine and decompose key environmental protection tasks, and further tighten tasks and compact responsibilities. In 2024, the Group included mining enterprises in the operation and audit scope of the ISO14001 environmental management system for the first time, and was supervised and reviewed by Hubei Quality Certification Center.

The Group implements the Annual Environmental Monitoring Program (《年度環境監測計劃》) by combining online and manual monitoring, i.e. regularly monitoring the pollutants to obtain knowledge of wastewater and exhaust emissions at the key points, so as to ensure that the emission of pollutants meets the standards. In order to strengthen the compliance management of online monitoring equipment and facilities, third-party professional units are hired to assist in conducting compliance inspections of online monitoring equipment to further consolidate the bottom line of legal compliance. The compliance rate of hourly values of online monitoring of environmental pollutants of all units of the Group reached 100% in 2024.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Usable materials in solid waste produced during the smelting process are further recycled and used by the Company; unusable materials are handed to professional companies for proper disposal; tailings slag from ore processing is disposed of by filling, curing cementation or professional tailings pond storage in compliant manner.

For the noise generated during the production process, facilities such as sound-proof walls, mufflers and shock absorbers, etc. are employed to minimize noise pollution, and noisy equipment is placed away from the residential areas and staff quarters. At the same time, in accordance with the relevant requirements of the Ministry of Ecology and Environment's "Notice on Carrying out the Management of Industrial Noise and Pollution Emission Permits", industrial noise will be included in the management of emission permits.

The Group has issued the Implementation Plan for Accelerating Green Development and Promoting the Construction of a Beautiful China (2024-2027) (《加快綠色發展推進美麗中國建設實施方案(2024-2027)》), which solidly promotes the implementation of the Company's comprehensive green transformation and strongly supports the realization of the goals of building a beautiful China by 2035 and the middle of this century.

1.2 Environmental initiatives

1.2.1 The Group insisted on focusing on the key points, and the central environmental inspection and rectification task came to a perfect end.

Case 1:

The closure of the tailings pond of Fengshan Copper Mine commenced in October 2022 and was completed in August 2024 with a total investment of RMB107.21 million. In August, the open-pit ecological restoration project was completed, and the tailings were all used for underground filling and open-pit ecological restoration, creating a tail-free mine and contributing to the construction of a "zero-waste city" in Huangshi.

Case 2:

In recent years, the Group has invested a total of approximately RMB1 billion to implement the largest smelter-wide upgrade and transformation of the smelter since its establishment. In May 2023, the upgrading and transformation project of rainwater and sewage diversion and water treatment was completed, realizing the quality treatment and cascade reuse of wastewater in the whole smelter, and the external drainage reached the "first-class A standard". In March 2024, the Group completed the environmental protection upgrade of the converter and the improvement of the production system of the whole smelter, achieving ultra-low emission of exhaust gas in the smelter area, reducing the concentration of sulfur dioxide emissions by more than 50%, and significantly reducing unit energy consumption and carbon emissions, reducing costs and increasing efficiency by RMB120 million per year.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Case 3:

The inspection has achieved remarkable results in rectification, and the Group has accepted the third round of environmental protection inspection, and inspections of South China Inspection Bureau and all levels and on-site inspections more than 60 times throughout the year, and the rectification results have been fully affirmed. CCTV's "Morning News World" (《朝聞天下》) has reported 3 times and the mainstream media platforms positively reported the story of the Group's green "transformation" for 32 times, realizing the transformation from a "typical example" reported in inspection to a "model" of environmental protection rectification to promote high-quality development.

1.2.2 The Group continued to strengthen the development of low-carbon transformation and build a green and recycling enterprise.

Case 1:

Actively promote the construction of green mines. Fengshan Copper Mine and Tongshankou Mine have successfully entered the provincial Green Mine List in September and October 2024 respectively. Tonglvshan Mine and Sareke Copper Mine have entered the national Green Mine List.

Case 2:

Yangxin Hongsheng's "Whole-process Intelligent Green Copper Smelting – Practice Case of Building a Green, Intelligent and Efficient Benchmark Factory" was successfully selected into the 2024 Green and Low-carbon Excellent Practice Case Collection of Central Enterprises (《2024 中央企業綠色低碳優秀實踐案例集》) by the State-owned Assets Supervision and Administration Commission of the State Council.

Case 3:

The Group has always been aiming at "energy saving, consumption reduction, pollution reduction and efficiency increase", and has steadily promoted the cleaner production audit and acceptance of each production unit. Yangxin Hongsheng has completed the first round of cleaner production audit, and the smelter, Fengshan Copper Mine and Tonglvshan Mine completed a new round of cleaner production audit and acceptance, implementing 8 medium – and high-cost plans and 53 no-cost and low-cost plans, with a total investment of RMB335 million, achieving quantifiable economic benefits of RMB45 million, and achieving an annual carbon dioxide emission reduction of 4,794 tons.

Case 4:

In 2024, the Group successfully obtained RMB7.08 million from the Central Soil Pollution Prevention and Control Fund (中央土壤污染防治資金) relying on the Project of Soil Pollution Source Prevention and Control of Smelter Wastewater Greening Transformation (《冶煉廠廢水綠色化改造土壤污染源頭防控項目》).

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

1.2.3 The Group insisted on strengthening environmental publicity, education and training.

Case 1:

Adhere to the implementation of environmental protection special training. Four company-level environmental protection special trainings were carried out, including "noise pollution prevention and control" and "beautiful China construction", and 337 people participated in the trainings. Each unit organized and carried out its own quarterly environmental protection special training at the plant and mine level.

Case 2:

Continuous special warning education. The Group's official public account issued four typical cases of law enforcement, with cases to promote learning and reform, and to build a solid environmental protection red line for the majority of employees and cadres.

1.3 Emission Statistics during the Reporting Period

In 2024, the central ecological and environmental protection inspection rectification met all the progress requirements of 34 tasks; no environmental emergencies occurred.

	2024	2023	2022	2021	2020
CO ₂ :	587,802 tonnes	529,073 tonnes	412,573 tonnes	484,264 tonnes	522,399 tonnes
SO ₂ :	238.96 tonnes	157 tonnes	191 tonnes*	294 tonnes*	1,709 tonnes
NO _x :	210 tonnes	161 tonnes	106 tonnes*	190 tonnes	139 tonnes
Dust:	24.38 tonnes	16.63 tonnes	12.6 tonnes	18 tonnes	37 tonnes
Production of hazardous waste:	86,303 tonnes	42,562 tonnes	71,880 tonnes	73,740 tonnes	82,056 tonnes
Disposal rate of hazardous waste:	100%	100%	100%	99.80%	100%
Production of non-hazardous waste:	5,029,134 tonnes	4,977,062 tonnes	3,795,657 tonnes	4,440,534 tonnes	7,143,418 tonnes
Disposal rate of non-hazardous waste:	100%	100%	100%	100%	100%

Note: CO₂ emissions are calculated according to the national "Guidelines for Accounting and Reporting Greenhouse Gas Emissions from the Smelting and Rolling of Other Non-ferrous Metals Industrial Enterprises" (《其他有色金属冶炼及压延加工工业企业温室气体排放核算方法与报告指南》). (Including the smelting plant, Rare and Precious Branch, Tonglvshan Mine, Tongshankou Mine, Fengshan Copper Mine, Xinjiang Hui Xiang Yong Jin, Yangxin Hongsheng, Design Research Institute)

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Data temporarily does not include Yangxin Hongsheng. Yangxin Hongsheng is now in trial production, and the current data is not representative. Their production capacity has not met the requirements, and there is no control for the time being.

- * The significant increase in pollutant emission data in 2024 compared to 2023 was due to the 9-month shutdown of the smelter in 2023 and the significant increase in the Group's product output in 2024.
- * The sharp drop in sulphur dioxide emissions in 2021 is due to the suspension of production and renovation after environmental inspections in 2020.
- * The significant year-on-year decrease in sulfur dioxide and nitrogen oxides on 2022 was mainly due to the smelter's implementation of central environmental protection supervision and rectification, and the strengthening of waste gas emission indicators. The concentration of waste gas emissions decreased year-on-year, and the amount of pollutant emissions decreased accordingly.

1.4 *Disclosure of information about the methods, standards and assumptions used to obtain gas emission data*

The carbon emissions in 2024 are calculated according to the national "Guidelines for Accounting and Reporting Greenhouse Gas Emissions from the Smelting and Rolling of Other Non-ferrous Metals Industrial Enterprises (trial)" (《其他有色金屬冶煉和壓延加工企業溫室氣體排放核算方法與報告指南(試行)》) issued by the National Development and Reform Commission.

Our total emissions in 2024 amounted to 587,801.93 tonnes of carbon dioxide equivalent, which can be divided into the following two categories:

- Scope 1: The direct emissions from the emission sources owned or controlled by the Company amounted to 117,722.99 tonnes of carbon dioxide equivalent, representing 20.03% of the total emissions. (Scope 1 presents the consumption of fossil energy purchased by the Company's production units, including the smelting plant, Yangxin Hongsheng, Tonglvshan Mine, Tongshankou Mine, Fengshan Copper Mine, Xinjiang Hui Xiang Yong Jin and Design Research Institute; the carbon emission consumption of purchased fossil energy is calculated by multiplying the consumption of fossil energy by carbon content per unit of calorific value, carbon oxidation rate and lower calorific value.)
- Scope 2: The indirect emissions from the electricity purchased and other energies purchased amounted to 470,078.94 tonnes of carbon dioxide equivalent, representing 79.97% of the total emissions. (Scope 2 presents the consumption of electricity purchased which is the main source of greenhouse gas emissions; the consumption of electricity purchased is calculated by multiplying the electricity consumption of all production units by the average carbon dioxide emission factor of national power grid; the emission factor adopts the figure 0.5703 as set out in the "Notice on the Management of Greenhouse Gas Emission Reports from Enterprises in the Power Generation Industry from 2023 to 2025" (《關於做好2023-2025發電行企業溫室氣體排放報告管理有關工作的通知》).

The Group is currently at an initial stage in collecting Scope 3 GHG emissions and is not yet ready to disclose the absolute total Scope 3 GHG emissions it has generated. It is planned to identify Scope 3 in 2025.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

1.5 Mid- and long-term goals for carbon dioxide emissions

By 2025, the Company's annual carbon dioxide emissions will be controlled below 830,300 tons.

By 2027, the Company's annual carbon dioxide emissions will be controlled below 845,000 tons under existing production capacity and will gradually decline.

By 2030, the Company's renewable energy use will be increased to account for more than 10% of the total energy structure.

2. Use of Resources

2.1 Energy Saving Control

The Group earnestly implements the relevant national and industrial energy conservation laws, regulations and standards, strictly observes and implements the Energy Conservation Law of the PRC 《中華人民共和國節約能源法》, the Electricity Law of the PRC 《中華人民共和國電力法》, the Energy Consumption Quota per Unit Product of Copper Smelting Enterprises 《銅冶煉企業單位產品能源消耗限額》, the Energy Consumption Quota per Unit Product of Non-ferrous Heavy Metal Smelting Enterprises 《有色重金屬冶煉企業單位產品能源消耗限額》 and other relevant laws and norms, and takes low-carbon green development as the goal of energy conservation management, and achieves comprehensive sustainable development through the implementation of effective control and management to improve energy efficiency in each stage of mining, selection and smelting. In 2024, the comprehensive energy consumption per unit product of smelter and Yangxin Hongsheng in copper smelting was 229.79kgce/t and 198.86kgce/t, respectively, reaching the level 2 (access value) and level 1 (advanced value) stipulated in the Energy Consumption Quota per Unit Product of Non-ferrous Heavy Metal Smelting Enterprises, and showing a downward trend.

Measures for Operation Management

- In 2021, the Group obtained the certification of the new ISO50001:2018 standard for energy management systems. The Group passed the second energy management system supervision audit certification in 2023, and passed the energy management system re-certification supervision audit in 2024.
- We follow the requirements of the energy management system, strengthen process control of energy consumption, maintain the continuous and effective operation of the system, and continuously reduce product energy consumption in production activities.
- Energy conservation-related technological improvement plans are formulated to step up efforts on energy saving technological transformation and energy mix adjustment, thus gradually reducing the proportion of fossil energy consumption, improving operation stability of key equipment and increasing energy efficiency.
- Annual energy consumption limits for all production units as well as total energy consumption control targets for the Group are formulated, and performance appraisals are carried out, to control energy consumption comprehensively in multiple levels.
- The usage and control of water resources are strengthened to increase recycling and reuse rate of circulation water and underground water. The management measures of water savings are introduced to reduce the new water consumption. The Group did not encounter any issues on seeking for sources of water.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Measures for Office and Domestic Management

- We strengthen the management of energy and water resources in the office process, use natural light for office lighting as much as possible, control the temperature of office air conditioners at energy-saving temperatures, take measures to improve the energy efficiency of lighting and air conditioning, and prevent the waste of energy and water resources.

Illustration

In 2024, Yangxin Hongsheng carried out the technical transformation of installing thermal insulation layer on the electrolytic cell, which can save about 72,000 tons of steam per year. The saved steam can be used for steam power generation in the power area, and the annual power output can increase by 9.43 million kWh. The steam consumption per unit, process energy consumption and comprehensive energy consumption in 2024 met the design requirements. The unit consumption of electrolytic steam was controlled below 0.25t/t·Cu, the energy consumption of the electrolytic process was controlled below 80 Kgce/t·Cu and reached the advanced value, and the electrolytic comprehensive energy consumption was controlled below 90 kgce/t·Cu and reached the advanced value.

In 2024, the smelters completed the key technology research and application of the overall optimization of the three-series sulfuric acid process. Through a series of process technology optimization, the sulfuric acid conversion rate of the acid production system was increased from 99.6% to 99.85%, the production capacity was maintained above 1,000kt/a, and the electricity unit consumption of acid production was reduced from 124kwh/t to 90kwh/t with annual power consumption reduction of 34 million kWh. In terms of environmental protection: the sulfur dioxide index of the three exhaust outlets of acid production and environmental collection has achieved ultra-low emissions in 24 hours, and the total sulfur dioxide emissions of smelters in 2024 have decreased by 31.7% compared with that in 2021. The concentration of arsenic in the arsenic sulfide residue was more than 35%, and the amount of hazardous waste residue produced by the whole waste acid system was reduced by more than 70%.

2.2 Improving Resource Utilization Rate

The Group conducts exploration of mineral resources in strict accordance with the Mineral Resources Law of the People's Republic of China 《中華人民共和國礦產資源法》 and strictly implements the Law of the People's Republic of China on Safety in Mines 《中華人民共和國礦山安全法》. Paying attention to the full utilization and protection of resources in the process of resource development, the Group enhances the comprehensive resource utilization rate for energy conservation and consumption reduction through measures including technological innovation and optimization of mining, processing and smelting processes to maximize the value of resource utilization.

Through production mining prospecting, mining prospecting data analysis, mining prospecting target area selection, ore body secondary delineation, etc., the amount of recoverable resources has been greatly increased and the loss rate of ore dilution has been reduced. Through the construction of digital mines and the application of new equipment, the operation efficiency has been effectively improved. Through technical breakthroughs and key technical index supervision and other projects, the recovery rate of ore processing can be improved, and various available resources can be effectively recovered.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

2.3 Indicators of Energy Consumption during the Reporting Period

	2024	2023	2022	2021	2020
Electricity consumption:	894,196 KWh	692,504,200 KWh	609,066,061 KWh	668,967,300 KWh	715,660,648 KWh
Natural gas consumption:	44,391,100 m ³	44,653,600 m ³	14,703,104 m ³	15,816,200 m ³	16,240,942 m ³
Total quantity of new water:	8,593,800 tonnes	4,393,300 tonnes	6,174,232 tonnes	5,967,800 tonnes	5,479,414 tonnes
Total raw coal :	39,800 tonnes	11,000 tonnes	31,400 tonnes	48,800 tonnes	56,200 tonnes
New water consumption per tonne of copper:	25.34 tonnes of water/tonne of copper cathodes	4.54 tonnes of water/tonne of copper cathodes	9.09 tonnes of water/tonne of copper cathodes	8.93 tonnes of water/tonne of copper cathodes	8.28 tonnes of water/tonne of copper cathodes

Notes:

- ① Electricity consumption includes all the electricity consumed for production at the smelting plant, Rare and Precious Branch, Tonglvshan Mine, Tongshankou Mine, Fengshan Copper Mine and Xinjiang Hui Xiang Yong Jin, Yangxin Hongsheng, Design Research Institute.
- ② Natural gas consumption (cubic meter) represents the quantity of natural gas consumed by the smelting plant, Yangxin Hongsheng.
- ③ Total quantity of new water represents the quantity of new water used for production in the smelting plant, Rare and Precious Branch, Tonglvshan Mine, Tongshankou Mine, Fengshan Copper Mine and Xinjiang Hui Xiang Yong Jin, Yangxin Hongsheng.
- ④ The total raw coal consumption is the raw coal consumption used for production and heating by the smelter and Xinjiang Hui Xiang Yong Jin.
- ⑤ New water consumption per tonne of copper (tonne of water/tonne of copper cathodes) is the indicator of water consumption for producing copper cathodes, the main products of the smelting plant, Yangxin Hongsheng.

3. Climate Change

The Group recognises that the long-term risks of climate change have far-reaching impacts on our operations and environment. As such, we are committed to mitigating the impacts of climate change and other environmental related risks. Changes in weather patterns and the increased severity of extreme weather events are physical risks which will likely disrupt the continuity of daily operations in terms of the ability of our employees for the company's business and operation. For this reason, we have developed emergency protocols to handle such events, as outlined in the Employee Handbook. As the awareness of environmental protection become more and more important in society, there is potential change in climate-related regulation and policy, including imposition of energy-efficiency requirements. Such transition risk may impact our operation cost and increase exposure of legal risk. Therefore, we monitor the changes of the regulation and policy regularly and make sure our operations are in line with the requirements of latest laws and regulations.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

3.1 Climate Change Risks

Governance

The Company has incorporated sustainable governance into its corporate governance framework to ensure that the Group's exposure to the risks of climate change is incorporated into the corporate agenda and that the Group is actively involved from top to bottom in the development and implementation of strategies to address climate risks.

Board level

The Board is the highest governance body of the Group and is the highest leading unit for managing climate change risks, formulating sustainable development strategic goals and supervising the effective implementation of relevant goals. The Board is responsible for formulating the strategic direction of the Group. When formulating strategic goals and development directions, the Board takes climate change-related issues and corporate social responsibility into consideration, sets goals for the management and supervises the achievement thereof.

Supported by the leadership committee and construction working group of internal control system, the Board retains ultimate responsibility for the oversight of the Group's risk management activities. The working group under the Board takes accountability on risk management, and reviews corporate risk management and internal controls at least once a year.

Under the Management Decision Committee, the Group has established a Safety and Environmental Supervision and Management Department. The Safety and Environmental Supervision and Management Department provides practical guidelines and support to the Group's sustainable development, and is tasked to ensure thorough implementation of the Group's sustainable management policies.

Management level

The risks brought on by climate change are placed high on the Group's agenda, and therefore, the Group is committed to building resilience against these risks. In particular, the Group has established a working group, the leader of which is mainly responsible for its leadership role, and annually develops, monitors and reviews safety and environmental indicators and targets. The leader shall firmly discharge his/her responsibilities and guide the various executive departments in taking measures to address climate risks.

Strategy

The Group understands that climate change will bring various risks to its business, such as physical risks such as water resource stress, floods and extreme weather, which will cause damage and negative impact on assets and supply chains; and transition risks such as policy changes and reputation, will also cause potential financial impact. Therefore, it is actively taking actions to address the impact of climate change. The Group is committed to reducing and offsetting greenhouse gas emissions, enhancing the resilience of the Group in response to climate change, and seizing relevant opportunities to build a cleaner environment. Facing the continuous impact of climate change, the Group has established and implemented a series of strategies to deal with climate risks, re-positioning the Group in the ever-changing world, in order to enhance the city's climate change resilience and promote sustainable development. The Group has adopted the following strategies to address climate change, and will strengthen its efforts and take more relevant actions to achieve the goal of carbon neutrality:

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Type	Name of the risk	Time frame of the impact	Analysis of the impact	Responses
Climate-related transition risk	Increased requirements for disclosure of carbon emissions	Short-term	The State and relevant departments have further strengthened the management of carbon emissions, and put forward the requirements of carbon peaking and carbon neutrality, and the Company will increase manpower and capital investment in carbon emission data management in response to policy requirements.	Establish and improve the carbon management system, carry out carbon footprint research, form a sound statistical mechanism, and reduce the manpower and management costs of enterprise.
Climate-related transition risk	Reduction of carbon emission indicators year-by-year	Mid-term Long-term	According to the relevant government policies, the carbon quota for enterprises will be gradually reduced. The Company is currently included in the carbon trading market of Hubei Province, and in the long run, it may need to purchase carbon quota, resulting in increased costs.	With large-scale equipment renewal as the starting point, strengthen the application of energy-saving and low-carbon technologies and equipment, reduce energy consumption levels, and reduce carbon emissions.
Climate change opportunities	Green and low-carbon products	Mid-term Long-term	The Company's comprehensive energy consumption per unit product has been reduced year by year through measures such as environmental protection upgrading, large-scale equipment renewal and industrial energy efficiency improvement action plan. As the country's requirements for energy conservation and consumption reduction become more and more stringent, green and low-carbon products will have strong competitiveness in the market, and the enterprises' reputation will be further enhanced.	Further reduce the energy consumption per unit product through the construction of intelligent factories, building a benchmark enterprise and improving the competitiveness of enterprises.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Analysis of the Impact of Climate-related Risks on Finance

During the Reporting Period, the working group has identified and assessed a number of climate-related issues that have affected or may affect the Group (e.g. disruption to production operations, supply chains, energy resources and logistics due to the increasing intensity and frequency of extreme weather events (e.g. typhoons, rainstorms, snowstorms, floods, etc.); replacement of existing products, services or technologies during the transition period; the increased capital expenditure and operating costs due to damage to assets and facilities; threats to employee safety; increased insurance premiums due to the potential recurrence of extreme weather events; possible implementation of climate-related regulations and policy changes; global transition to a low carbon economy through energy efficiency innovations, etc.).

Climate-related risks	Climate risk outcomes	Potential financial impact
Policy and legal risks (low risk)	The Group may face the risks of being held legally liable or subject to regulatory measures, facing disciplinary actions, encountering property damage or loss of business reputation due to its failure to meet climate-related policies or laws.	Reduction of operating income, increase of credit risks
Technology risks (low risk)	In the process of low-carbon technology transformation, the development and application of energy-saving and environmental protection technologies such as renewable energy and new energy may have certain impacts on the operation and business of the Group.	Reduction of fixed asset value, increase of R&D investment cost
Acute physical risks (high risk)	Severe climate changes such as extreme weather or natural disasters such as typhoons and floods, among which rainstorm will cause flooding can aggravate the Company's flood relief efforts. Extreme weather may lead to disruptions in the transportation of raw materials and products, as well as reduction of efficiency of mine and smelter production operations.	Reduction of operating income, increase of operating cost, and reduction of fixed asset value
Environmental risks (high risk)	The Company's major environmental risks include contaminant leakage and the occurrence of events such as the construction and operation of projects that do not meet expectations due to their impact on the environment.	The Company's headquarters and subsidiaries take impermeable measures in accordance with the regulations and have set up collection ponds and weirs to prevent harmful substances from leaking into the environment, and also conducts regular emergency drills for hazardous waste.
Chronic physical risks (low risk)	The long-term shift in natural phenomenon such as rising of sea level and continuous high temperature may influence the normal operation of the Group.	Increase of operating cost, and reduction of fixed asset value
Reputation risks (low risk)	The public pays more and more attention to green operation. If the Group fails to meet the expectations of stakeholders, it may face reputation risk in the operation.	Reduction of operating income, increase of operating cost
Market risks (low risk)	Considering the business characteristics of the industry, the risk of transformation caused by the increased demand of consumers for green products and services.	Reduction of operating income, increase of operating cost

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

It is concluded that these climate-related issues are not material to the Group. The materiality assessment, as detailed in the “Stakeholder Engagement and Peer Benchmarking” and “Materiality Assessment” sections above, indicated that the materiality of A4 Level: Climate Change and Key Performance Indicator A4.1 has been currently ranked as “low” overall, consistent with the conclusions of the Enterprise Risk Management team above.

Analysis of the Impact of Climate-related Opportunities on Finance

During the Reporting Period, the working group has identified and assessed a number of climate-related issues that have affected or may affect the Group (e.g. promotion of resource and energy use efficiency, etc., use of clean energy and low-carbon energy instead of traditional high-carbon energy, selection of environment-friendly suppliers resulting in lower operating cost and higher operating income).

Climate-related opportunities	Climate opportunities outcomes	Potential financial impact
Resource efficiency	The Group promotes energy conservation and emission reduction through promoting resource and energy use efficiency, etc., which is conducive to reducing operating costs.	Reduction of operating costs
Energy sources	The use of clean energy and low-carbon energy instead of traditional high-carbon energy will help significantly reduce the uncertainty of Group’s energy expenditure in the future.	Reduction of operating cost risks
Resilience	The Group’s climate resilience is enhanced by adopting energy efficiency measures in operations and choosing environment-friendly suppliers and partners.	Increase of operating income, and reduction of operating costs

It is concluded that these climate-related issues are not material to the Group.

3.2 Carbon Emission

We focused on the goal of “carbon peak and carbon neutrality,” and our green and low-carbon development pattern was continuously consolidated and improved. We support the Paris Agreement and the Chinese government’s National Strategy for Climate Change Adaptation. Achieving the “Carbon Peak” and “Carbon Neutrality” goal and stepping into the “renewable energy and advanced materials” business have become important components of the Company’s development strategy for the next decade.

The Company has been firmly establishing its “energy transformation and green low-carbon development” concept in quickening the promotion of green transformation and development. The Company has successively completed the full-process transformation of mining and smelting systems, greatly improving the level of greening, intelligence, mechanization, automation and informatization. At the same time, the Company steps up efforts on the management of energy conservation and carbon reduction, and promotes the continuous development of energy conservation and carbon reduction work through measures such as advancing the construction of energy management systems, promoting the application of energy-saving technologies, strengthening the management and control of production process, and optimizing the energy mix.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

The Company has always actively supported and participated in the building of the carbon emission market. In 2013, the parent company became a shareholder of China Emissions Exchange in Hubei Province. In 2014, it was among the first group of enterprises to participate in the pilot carbon emission trading market in Hubei Province, achieving certain results in terms of carbon emissions planning, verification and trading as well as carbon reduction technology, etc. With the implementation of projects including increasing the oxygen enrichment of the Ausmelt furnace with the smelting system to reduce electricity and raw coal consumption, applying the lean-oxygen combustion technology at the refining furnace to reduce natural gas consumption, dismantling renewable resources and recovering scrap copper to reduce energy consumption in the blister copper smelting process, the Company plays a significant role in controlling and reducing carbon dioxide emissions in the course of production.

The Company has a long-term plan for carbon emissions, aiming at carbon peaking by 2030 and carbon neutrality by 2060. "Carbon peaking" means that carbon dioxide emissions no longer increase, and gradually decrease after reaching the peak. "Carbon neutrality" means that total amount of carbon dioxide generated from enterprise offset through tree planting, energy conservation and emission reduction, and other means to achieve "zero emission" of carbon dioxide.

Carbon peaking and carbon neutrality have presented a huge issue for the green, low-carbon and high-quality development of enterprises. However, in the specific implementation process, the gradual emergence of issues including the few number of latest low-carbon and zero-carbon technologies being developed and promoted for application, the relatively high cost of implementing low-carbon technology, the slow speed of developing clean energy, the need for further research and promotion of carbon capture technology, etc., has formed certain obstacles for enterprises to achieve the goals of carbon peaking and carbon neutrality.

The Company is vigorously promoting the development of double carbon work in accordance with the national requirement to promote "carbon peak and carbon neutrality". The Company has set up a leading team for the "carbon peak and carbon neutrality" action, formulated work responsibilities and action requirements, organized continuous learning and training on the policy requirements of "carbon peak and carbon neutrality", studied carefully the ideas and technical methods for the implementation of the double carbon action, and formed the implementation direction and working ideas for the implementing of the action.

In order to implement the new development concept, focus on reducing carbon emissions, accelerate the formation of green production methods, strengthen green technology innovation, and help the Company achieve high-quality development, the Company is engaging a professional institution to prepare an implementation plan for the "carbon peak and carbon neutrality" action and develop and build the Company's carbon assets management information platform. Through a comprehensive and systematic verification on the Company's existing carbon emissions, and LCA full life-cycle assessment and analysis of the carbon footprint of the main products, the project carries out research on low-carbon technology measures and carbon reduction potential technologies, proposes targeted low-carbon control solutions for each production control step and business segment, builds the Company's carbon assets and carbon footprint information management platform system, formulates the technical roadmap and implementation steps for carbon peak and carbon neutrality, and conducts overall research and planning of the Company's carbon management system (carbon emission rights, carbon assets, carbon finance, etc.). Finally, a scientific, systematic, quantifiable and practical implementation plan for the Company's "carbon peak and carbon neutrality" action has been formed and implemented. The first draft of the action plan has been formed and the Company's carbon assets information management platform has been built and is ready for operation. Upon completion of the project, it will provide substantial planning and guidance for the commencement of the Company's double carbon work.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Next, the Company will vigorously promote the development of energy utilization in the direction of high efficiency and cleanliness in combination with double carbon planning, vigorously promote the application of key national energy-saving and low-carbon technologies, clean energy technologies, new energy storage technologies and low-temperature waste heat recovery technologies within the Company, gradually explore ways to adjust the energy structure, improve energy use efficiency and build a clean, low-carbon, safe and efficient energy management system. The Company will improve the dual control of total energy consumption and intensity, seek various effective paths of carbon peak and carbon neutrality, and strive to promote the achievement of the goal of carbon peak and carbon neutrality.

SOCIAL

1. Safety Development

Adhering to the principle of putting people and their lives first, the Group gives top priority to the protection of employees' lives and safety, firmly establishes the safety development concept upholding the policy of safety first, prevention the key and comprehensive management, strictly complies with the laws and regulations of the PRC on production safety, and establishes and continuously improves its occupational health and safety management system, thus providing a safe and healthy workplace for employees for the protection of their safety and health.

The Group strictly abides by national production safety laws, regulations and standards such as the National Work Safety Law and the Occupational Disease Prevention and Control Law, continues to improve the occupational health and safety management system, strives to create a healthy and safe working environment, protects the physical and mental health of employees, and establishes a good corporate image.

1.1 Safety Management System

The Group and its subsidiaries Yangxin Hongsheng and Research and Development Company have passed the ISO45001 occupational health and safety management system audit and certification; the smelter has passed the on-site review of the second-level enterprise for production safety standardization.

- Safety management organization: The chairman of a corporation of the Group is the top manager of the corporation's occupational health and safety management system, responsible for system operation planning and command. The corporation's general manager is the representative of management. Under the leadership of the top management, he is responsible for the establishment, implementation, maintenance and improvement of the process required by the corporation's occupational health and safety management system. The Group has set up a Safety Supervision and Management Department as a specialized institution for safety management, and is manned by safety directors and full-time safety production managers who meet the requirements of laws and regulations. Each mines is equipped with five mine directors in accordance with the requirements of the State Mine Safety Supervision Bureau.
- Safety performance inspection: The Group signs an annual "Safety Production Target Responsibility Letter" with each of its affiliated factories and mines every year. The Group has established a safety performance evaluation procedure to regularly review and examine its compliance with laws and regulations, the progress of its goal achievement, the operation of its occupational health and safety management system, its safety education and training and other aspects so as to identify opportunities for improvement, formulate improvement measures and continuously improve its safety management performance.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

- Safety inspection and rectification: The Group has formulated management systems such as the “Measures for the Investigation and Control of Production Safety Accident Hazards” (《安全生產事故隱患排查治理辦法》) and the “Measures for the Investigation and Rectification of Major Accident Hazards” (《重大事故隱患排查及整改銷號管理辦法》). The group and its affiliated factories and mines have established a safety risk classification control list and a hidden danger investigation and treatment list, and adopted corresponding control measures according to the safety risk classification, carried out dynamic management, conducted safety inspections and hidden danger treatment on a regular basis, and reported hidden dangers discovered during the inspections to employees through information disclosure columns and other means. The main responsible persons of each factory, mine and enterprise shall organize a major accident hazard inspection every month in accordance with the “Major Accident Hazard Judgment Standards” (《重大事故隱患判斷標準》) of their industry, and report to the local emergency department in accordance with the law.
- Safety emergency management: The Group has established an emergency rescue system, formulated corresponding emergency plans for different types of accident risks and regularly organized emergency drills. A national-level mine emergency aid team has been established in Daye, and job training and actual combat exercises are carried out on a regular basis. The company’s emergency rescue team won the first place in the comprehensive skills of the professional group and the second place in the total score of the professional group in the 2024 Emergency Rescue Force Professional Skills Competition in Hubei Province, and was fully recognized by the Provincial Emergency Rescue Center.
- Safety education management: The Group has established a “three-level” safety training system covering the corporation, workshops and production teams, and has formulated The Company’s Implementation Plan for the Safety Skill Improvement Action Plan (《公司安全技能提升行動計劃實施方案》) to organize and conduct skill improvement training for safety management personnel, production team leaders and employees. A total of more than 6,066 personnel were trained for the main persons in charge of the organizational unit, safety management personnel, special operations personnel, new employees and other personnel. The Group regularly organizes a series of safety promotion, education and training activities, such as “Safety Alert Month” (事故警示月), “Production Safety Month” (安全生產月), “Ankang Cup” (安康杯) and “100 Days with Zero Accident” (百日安全生產無事故) to enhance the safety awareness and skills of its employees.
- Occupational health protection: The Group strictly implements laws and regulations such as the Law on the Prevention and Control of Occupational Diseases, and conducts occupational hazard inspections every year in workplaces where harmful factors such as dust and noise exceed the standard. In strict accordance with the standards for the provision of protective supplies, the Group provides its employees with protective products, such as safety helmets, dust masks, gas masks, protective glasses and earplugs. Through the adoption of dust washers and ventilators and other measures, the Group reduces dust concentration at the work site to improve the operating conditions, thus protecting the physical and mental health of its workers. Every year, the Group conducts regular occupational hazard tests on the work site, organizes medical checkups and rehabilitation trips for its employees, and purchases medical insurance, work injury insurance and safety liability insurance for those who meet the requirements. In 2024, the acceptance inspection of occupational disease protection facilities and evaluation of occupational hazard control effectiveness for the smelting and chemical upgrading project of the smelter have been completed.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

1.2 Safety Operation

In 2024, in accordance with the three-year action deployment for tackling the root cause of safe production of the Safety Committee of the State Council and the State-owned Assets Supervision and Administration Commission of the State Council, the Group formulated the Three-year Action Plan for Tackling the Root Cause of Production Safety (2024-2026) (《安全生產治本攻堅三年行動方案(2024-2026 年)》), and fully implemented the three major projects of tackling hidden dangers in production safety, strengthening the foundation and improving the efficiency. We made solid progress in implementing special projects in key areas such as mining, smelting, firefighting and construction. We completed 27 major accident management projects, promoted 25 sets of advanced technology equipment, and eliminated 56 sets of outdated technology equipment. We deepened the development of dual prevention mechanisms and work safety standardization, and established the Group's safety production information management system, further improving the safety management efficiency.

The Group adheres to the intelligent construction of mines as the only way of improving the safety and efficiency, transformation and upgrading and high-quality development of mines, and coordinates the promotion of intelligent mines and the action of science and technology and safety and environmental protection in three years. Fengshan Copper Mine and Tonglvshan Mine have realized unattended and systematic mechanism control of fixed posts such as underground lifting and drainage. The intelligent management and control hall of Tongshankou has been built, and the functions of intelligent ventilation, production and operation, intelligent decision-making data integration of mining and selection costs have been realized. Through the introduction of advanced equipment such as excavation trucks and medium and long hole trucks, the operating level of the mine unit was reduced by 7, the operating personnel was reduced by 290, and the level of intrinsic safety has been further improved.

The Group also exhibits its concern about road safety and traffic control by deploying dedicated traffic management personnel for daily traffic control. We provide education and training on road safety to drivers on a regular basis, who must pass the examination held by the safety management department before they are allowed to commence work. The Group's safety management department organizes regular safety examinations and installs GPS-powered real-time monitoring systems and video surveillance systems on vehicles transporting hazardous chemicals for real-time monitoring.

The Group also takes into serious consideration the safety management of its contractors. An outsourcing safety management system has been established, under which all contractors of construction projects must pass a safety qualification examination before they are admitted and a Production Safety Management Agreement (《安全生產管理協議》) would be entered into in order to clarify their respective rights and obligations for production safety. The access points for subcontracting teams were strictly controlled and identified through access control video. Anyone who did not wear a safety helmet or did not wear adequate labor protection were not allowed to enter the construction site, and the mine labor dispatch personnel were removed. At the same time, we will strengthen the investigation and punishment of violations, and remove subcontractors and contractors who work in violation of regulations.

1.3 KPIs

During the reporting period, at about 16:57 on 14 September 2024, a fire broke out in the electric mist precipitator of environmental collected flue gas desulfurization system of the Group in Yangxin Hongsheng, Huangshi Xingang (Logistics) Industrial Park, Hubei Province, which was extinguished at about 8:30 p.m. on the same day. The fire did not cause personnel injury or environmental pollution accidents.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

2. Employment Relationship and Labor Standards

The Group complies strictly with the laws, regulations and policies on human resources and social security, and has formulated a comprehensive human resources management system to ensure the legality and compliance of its labor employment. The Group has also established a diversified income distribution system to open up the development and promotion channels, while providing multi-level training and various welfare benefits to its employees.

2.1 Employment

The Group insists on hiring its staff in compliance with the laws and regulations, entering into labor contracts with them to protect their legitimate rights and interests and promoting harmonious and durable labor relations. During the Reporting Period, the Group did not incur any serious violations of laws and regulations in terms of recruitment and promotion, remuneration and dismissal, working hours, holidays, equal opportunities, diversity, anti-discrimination, other treatment and benefits, and forced labor.

- The Group implements a standard working hours system to ensure reasonable working hours for its employees and made reasonable arrangements for its employees to take paid leaves.
- The Group strives to provide a healthy and safe working environment for its employees, distributes necessary protective equipment to them, and arranges regular medical checkups, rehabilitation and recuperation for those working in toxic and hazardous environment.
- The Group complies strictly with the Labor Law of the People's Republic of China (《中華人民共和國勞動法》) and the Labor Contract Law of the People's Republic of China (《中華人民共和國勞動合同法》) and the labor contract signing ratio of the employees of the Group has reached 100%.
- The Group absolutely forbids the use of child labor and forced labor.
- The Group protects the rights and benefits of its female employees in pregnancy, childbirth and breastfeeding.
- The Group opposes discrimination and treats our employees from different countries, ethnicities, genders and religions in a fair and equitable manner.

2.2 Care for Our Employees

The Group cares for its employees, organizing diverse and interesting cultural and sports activities, as well as physical examination and protection for occupational disease for our employees to enhance their sense of happiness and loyalty.

- The Group takes good care of its employees in need and makes efforts to satisfy their daily needs. We sponsor targeted missions such as support, mutual help and major disease relief to help those suffering from various kinds of difficulties; we also pay condolence visits to the junior level staff and worker exemplar during holidays to extend our greetings and make them feel the warmth like a family.
- The Group provides soccer fields, basketball courts, tennis courts, and badminton courts, and regularly organises various cultural and sports activities, such as basketball, badminton, chess and card competitions, as well as Labor Day and National Day evening parties, for our employees.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

2.3 Remuneration and Incentives

The remuneration of our employees is determined based on the value of their positions as well as the Group's operating results and the individual employee's performance, which is assessed through a complete performance appraisal system, under the principle of fairness, equity and transparency.

- The Group has established a remuneration management system which is pegged to the achievement of the Group's targets and the completion of respective unit's tasks, whereby the total remuneration varies with the profits of the Group and the units.
- The Group implements a diversified distribution system based on the performance of its employees with various forms of payments, such as annual salary, agreed salary, output-based salary and commission for marketing staff.
- We aim at sharing the Group's profits with its employees and continuously improve their income.

2.4 Employee Development

The Group offers education and training programs to our employees with the aim of "growing into an enterprise with learning atmosphere and cultivating employees with learning altitude", reserving talent for our production and operation and development strategies. While ensuring the sustainable and stable development of the Group, respecting the personality and desires of our employees, we adhere to the training theory of "training for everyone and forever", aiming to provide it with various outstanding management, technical and operational talents. Our education and training programs are organized under the principle of "effectiveness-oriented and learn for application", with a hierarchical and categorized training system and a variety of training activities to provide quality resources for the long-term development of our employees.

On 25 November 2024, the Group held an opening ceremony for a training course for young managements. 41 young managements from various units of the Group participated in the training.



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

2.5 KPIs

As at the end of 2024, the Group had a total of 5,210 employees, which are distributed as follows:

1. Age: 0 under 18; 671 between 18 and 29; 887 between 30 and 39; 2,380 between 40 and 49; and 1,272 at 50 or above;
2. Gender: 4,499 males and 711 females;
3. Type of employment: 100% on a permanent basis;
4. Employees trained: 4,503 males in 2024, with a training rate of 100%, 707 females, with a training rate of 100%; the average number of training hours per employee is 43;
5. Voluntary turnover rate: 10 in 2024, accounting for 0.19% of the total employees; among them, 0.02% are between 18 and 29; 0.06% between 30 and 39; 0.08% between 40 and 49; 0.02% are male and 0.11% are female.

3. Supply Chain Management

3.1 Environmental and Social Risk Policies for Managing the Supply Chain

The Group is a state-owned large-scale copper industrial conglomerate engaged in geological exploration, mining, mineral processing, smelting and processing, etc. The Group mainly engaged in non-ferrous metal resources development and copper smelting, and the raw materials required for non-ferrous metal resources development are mostly imported copper concentrates, blister copper and anode plates.

The Group manages its supplier with performance evaluation in accordance with a full set of rules such as Credit Risk Management (《信用風險管理》), Implementation Measures for Investing Responsibility for Non-compliant Operation (《違規經營投資責任追究實施辦法》), and Copper Procurement Management Measures (《銅原料採購管理辦法》), aiming to strengthen the access approval, evaluation and withdrawal of suppliers, improve the supplier evaluation system, standardize the Company management on the full life cycle of suppliers, and improve the quality of supplier resources.

The Group attaches remarkable importance to supply chain risk control and maintains comprehensive assessment and control of the environmental, social and governance risks of its suppliers through on-site inspection, telephone communication, Internet information, and review by third-party agencies, etc.

The growth of global copper smelting capacity has been much higher than the growth of copper concentrate capacity since 2024, due to the gradual release of new smelting capacity around the world. In the next few years, the global copper concentrate market will continue to face supply shortages, and the shortage of copper concentrate supply is expected to continue until around 2027. The tight supply of copper concentrate is being transmitted to the smelting end at a faster pace. In the next few years, competition among smelting companies in the same industry will intensify and procurement costs will continue to rise.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

3.2 KPIs

3.2.1 KPIs (Number of suppliers by region)

Year	Raw Material Sources Region	Region	Number of Suppliers
2024	Imported raw materials	Chile	12
		Peru	11
		Mexico	9
		Democratic Republic of the Congo	7
		Australia	4
		USA	4
		Eritrea	2
		Canada	2
		Turkey	2
		Brazil	1
		Papua New Guinea	1
		Botswana	1
		Philippines	1
		Kazakhstan	1
		South Korea	1
		Laos	1
		South Africa	1
		Serbia	1
		Saudi Arabia	1
		Taiwan	1
		Spain	1
		Armenia	1
		Vietnam	1
	Domestic mines	Within the province	13
		Jiangxi	6
		Sichuan	2
		Zhejiang	1
		Guangxi	1
		Hainan	1
	Blister copper, anode plate	Within the province	2
		Jiangxi	9

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

3.2.2 *KPIs (Illustrate the management of the supplier, the number of suppliers to whom the practice is enforced, and the related implementation and monitoring methods)*

The Group attaches great importance to the exploration of non-ferrous metal resources and purchases raw copper from qualified suppliers in accordance with the Group's criteria. When selecting the suppliers, we take into account the price, the stability and reputation of the goods and the environmental protection policies of the suppliers. Our commerce department evaluates the quality of the supplied goods and the operation of key links in the execution process every six months based on the supplier's supplying strength and ability to fulfill the contract, and submits the evaluation results to the relevant senior managements for approval, so as to ensure that the quality and price of the purchased raw materials meet the requirements. Meanwhile, process implementation was examined from time to time and offer suggestions for improvement.

During the Reporting Period, the Group included the key indicators of the quality of raw materials, i.e. the grade of copper and sulfur, in its annual performance appraisal system, and improved and optimized the system based on the appraisal results.

3.2.3 *KPIs (Illustrate the practices for identifying environmental and social risks in each link of the supply chain, and the related implementation and monitoring methods)*

The Group assesses the impacts of its suppliers on the environment and society in their production or supply chain by maintaining contact with them, and continuously monitored them in collaboration with the relevant departments of the Group and made appropriate procurement recommendations to the senior management in a timely manner.

During the Reporting Period, the Group sorted out and examined the latest operations development and the credit risks of its suppliers in the supply chain such as abnormal changes in their industrial and commercial registration, major tax violations and defaults, dishonest person subject to enforcement etc., aiming to eliminate those with abnormal operating conditions and high credit risks in a timely manner.

3.2.4 *KPIs (Illustrate the practices for encouraging the suppliers to use more eco-friendly products and services during the screening process, and the related implementation and monitoring methods)*

During the Reporting Period, the Group's commerce department made its utmost efforts to encourage our suppliers to adopt more eco-friendly ways in providing mining services and helped them optimize their production processes.

3.2.5 Green supply chain: During the reporting period, the Group adhered to the procurement policy of direct supply of copper concentrate to mines and direct supply of blister copper/anode plates to manufacturers, giving priority to green mines as partners, strictly controlling the impurity content of incoming raw materials, and preventing suppliers from supplying plastic films being placed in the compartments of freight transport vehicles, so as to reduce the impact on the environment pollution and impact on production.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

3.2.6 KPIs (*Illustrate the energy saving and emission reduction management requirements for suppliers, and monitoring of supplier gas emissions.*)

The Group attaches great importance to the selection of suppliers and strictly implements supplier admission procedures to carry out supplier admission review. Through on-site surveys, telephone communications, online information, third-party information verification, etc., it extensively collects the basic information and environmental safety of suppliers. Qualifications and other information, suppliers that do not meet national environmental protection requirements, have environmental protection and safety penalties, and have not made rectifications in place will not pass the review. At the same time, in the process of business development, we insist on dynamic assessment of supplier credit and environmental protection status, and forcibly cancel the qualification of qualified suppliers for suppliers that have been subject to national environmental protection and safety inspections and notified, and have not yet completed rectification.

During the reporting period, the Group sorted out and investigated the latest safety and environmental protection status of all suppliers in the supply chain, and promptly eliminated suppliers that did not meet national environmental protection requirements.

4. Product Responsibility

The Group complies strictly with relevant laws and regulations including the Product Quality Law of the People's Republic of China (《中華人民共和國產品質量法》) and the Metrology Law of the People's Republic of China (《中華人民共和國計量法》), etc. in its production process. All our products and labels have met the applicable national and industrial quality standards. Our products had a 100% success rate in various product quality sampling tests conducted by national, provincial and municipal government authorities. During the Reporting Period, no punishment was imposed on the Group due to violation of laws and regulations in relation to product quality and technical supervision.

- The Group has established comprehensive quality management systems, under which all the products must be thoroughly tested according to customer's requirements and relevant national standards before leaving the factory. Daye Metal has passed and obtained ISO9001 Quality Management System Certificate, ISO10012 Measurement Management System Certificate, ISO14001 Environmental Management System Certificate, ISO45001 Occupational Health and Safety Management System Certificate and ISO50001 Energy Management System Certificate. Daye Metal aims for zero defect in product quality by insisting on the quality policy of "first-class products, services in good faith, management excellence and market development".
- A strict product inspection system has been established to ensure high product quality in highly-effective production process. In addition to its established customer communication platform, Daye Metal also conducts annual customer satisfaction surveys, aiming to understand customers' opinions on the services of Daye Metal. Apart from regular technical seminars, Daye Metal also has a customer complaint mechanism. Containment actions will be taken within 24 hours upon receiving customer complaint to ensure that once a defective product is reported, the cause will be found out within seven days and preventive measures will be implemented, and the customer will be informed of follow-up measures on a timely basis, while internal review will be made and internal management will be improved.
- In order to foster a good quality management culture, Daye Metal promotes a quality-oriented philosophy among its employees, and carries out different quality assurance education and training for its management, technical staff and front-line operators, aiming to continuously improve their awareness of the importance of quality, the quality efficiency and legal compliance in quality through organizing the "Month of Quality" activities, targeted technical challenges and improvement in quality assurance methods.
- Daye Metal attaches great importance to the protection of customer privacy and undertakes to avoid disclosing customer information when signing contracts with customers to protect customer's privacy.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

4.1 KPIs:

A2.5 The total amount of packaging material used in the finished products (in tonnes) and, if applicable, the amount per unit of output.

The packaging materials used for the finished products are mainly steel belts, with a total consumption of 655 tonnes and 0.8-1 kg per tonne of production.

B6.1 The Group did not identify any cases of non-compliance of its products and services with the relevant health and safety legislation.

B6.2 According to the 2024 customer satisfaction survey, customer satisfaction with the Group is 99.4%.

B6.3 The Group is committed to complying with the national policies and laws and regulations pertaining to the protection of intellectual property rights. During the Reporting Period, the head office of the Group did not receive any reports on violations in the protection and safeguarding of intellectual property rights.

B6.4 The Group has established a product quality accountability management system, and conducts regular assessments of customer satisfaction, initiates quality accountability for complaints against the Company's major products (copper cathode, gold, silver and sulfuric acid), monitors the quality of production, operation and sales, formulates preventive measures and supervises their implementation.

B6.5 During the Reporting Period, the head office of the Group did not receive any complaints due to the leakage of customer information.

4.2 Application of Reporting Principles

The product responsibility of Daye Metal is identified according to the quality management system standard GB/T 19001-2016/ISO 9001:2015.

Total amount of packaging materials used in finished goods (in tonnes) and, if applicable, the amount per unit of output. The packaging material for finished goods are mainly steel belts, with a total consumption of 563 tonnes and 0.8-1 kg per tonne of production. The process of calculation is as follows: the total copper cathode production in 2024 is 700,329 tonnes (smelting plant: 378,285 tonnes, Yangxin Hongsheng: 322,044 tonnes) and the finished copper cathode products are packaged at 2.50 ± 0.05 tonnes/bundle, resulting in 280,132 bundles. The weight of the packaging material of the smelters is 2.2 kg/bundle, so the total weight of the packaging material will be $115,314 \text{ bundles} \times 2.2 \text{ kg/bundle} = 332,891 \text{ kg} = 333 \text{ tonnes}$, and the amount of packaging material per unit of production is $2.2 \text{ kg/bundle} \div 2.5 \text{ tonnes/bundle} = 0.88 \text{ kg/tonne}$. The weight of the packaging material of Yangxin Hongsheng is 2.5 kg/bundle, so the total weight of the packaging material will be $128,817 \text{ bundles} \times 2.5 \text{ kg/bundle} = 322,043 \text{ kg} = 322 \text{ tonnes}$, and the amount of packaging material per unit of production is $2.5 \text{ kg/bundle} \div 2.5 \text{ tonnes/bundle} = 1 \text{ kg/tonne}$.

4.3 Illustration

The Group's "Dajiang" brand copper cathode, "Dajiang" brand gold bullion and "Dajiang" brand silver have all been named as a Famous Brand Product of Hubei Province. Among them, "Dajiang" brand gold bullion and "Dajiang" brand silver have passed the qualification certification of the London Bullion Market Association (LBMA), and "Dajiang" brand Grade-A copper, which has been officially recognized by the international community for its quality, is a brand registered with the London Metal Exchange (LME) for delivery.

In 2024, copper cathode, sulfuric acid, gold bullion, silver and other products of the Group have been registered with domestic and foreign exchanges and have been inspected and confirmed by authoritative testing institutions at home and abroad. Their quality fully meets the standard requirements and reaches the international advanced level.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

5. Anti-corruption

The Group gives particular attention to improving the integrity of the Party members and maintains its anti-corruption efforts in strict compliance with the relevant national laws and regulations of the PRC as well as basic rules and regulations of the Company, including the Supervision Law of the People's Republic of China 《中華人民共和國監察法》 and the Regulation of the Communist Party of China on Disciplinary Actions 《中國共產黨紀律處分條例》, upholding the general line of making progress while maintaining stability, closely following the theme of high-quality development, conscientiously performing its supervision duties, giving full play to the role of supervising and guarding implementation and promoting and improving development, thereby providing a strong guarantee for the green and high-quality development of the Group. During the Reporting Period, the Group did not incur any cases of corruption and other violations.

- The Group perseveringly carries out various forms of alert education activities, and with focus on typical cases of violation of discipline and law that are investigated and dealt with at higher levels, conducts special education activities within the Group, allowing employees to learn profound lessons and enhance their awareness of integrity.
- Adhere to special governance to improve supervision effectiveness. Strengthen supervision and control, and carry out special rectification of illegal business activities by the senior managements and their families, "micro-corruption" at the grassroots level, and unhealthy practices among the masses. Through the "Supervision Recommendations" 《監督建議書》, we promoted special governance on the front line, urged the human resources department to carry out special supervision and inspection of wage payments; urged the Audit Department to carry out special audits on sulfuric acid sales; urged the Finance Department to carry out special inspections on fund payments, standardize fund payment management, and ensure fund security; urged the Investment and Engineering Management Department to carry out special rectification of project subcontracting to further standardize management and prevent risks.
- The Group improves the reporting and accusation mechanism, making publicly available the complaint hotline, mailboxes and methods of sending letters and visits about reporting corruptive acts, with the aim of regulating the handling of all kinds of reported information.
- The Group strengthens the building of discipline inspection teams and mobilizes its discipline inspection officials to carry out intensive learning and training seminars, which has enhanced their political literacy and has improved their comprehensive ability to perform supervision and enforcement accountability.

6. Community Investment

The Group attaches importance to the fulfillment of social responsibilities, and advocates the concepts of patriotism, integrity, law-abiding, innovation, amiability and responsibility to upgrade the employees' moral accomplishment. The Group actively participates in welfare, charity and public undertakings to contribute to the growth of enterprises and surrounding communities, and our employees' sense of social responsibilities has been continuously strengthened.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Illustration

Co-construction of enterprise and local area – Psychological adjustment of female employees



Co-construction of enterprise and local area – Lecture on health knowledge for female employees



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Illustration

Co-construction of enterprise and local area – Industry BA basketball game



Co-construction of enterprise and local area – Psychological consultation



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Illustration

Co-construction of enterprise and local area – Volleyball game



Co-construction of enterprise and local area – Making friends



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

Illustration

Co-construction of enterprise and local area – Badminton competition



Co-construction of enterprise and local area – Lecture on marriage and family care



Co-construction of enterprise and local area – Legal education special session



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDE INDEX

Scope set out in the Environmental, Social and Governance Reporting Guide	Key Environmental, Social and Governance Issues of the Group	Page
A. Environmental		
A1. Emissions	Environmental Protection	10
A2. Use of Resources	Use of Resources	12
A3. The Environment and Natural Resources	Environmental Protection	7
	Use of Resources	12
A4. Climate Change	Climate Change	14
B. Social		
B1. Employment	Employment Relationship and Labor Standards	23
B2. Health and Safety	Safe Development	20
B3. Development and Training	Employment Relationship and Labor Standards	10, 20, 24
B4. Labor Standards	Employment Relationship and Labor Standards	23
B5. Supply Chain Management	Supply Chain Management	25
B6. Product Responsibility	Product Responsibility	28
B7. Anti-corruption	Anti-corruption	30
B8. Community Investment	Community Investment	30