ZiJin

SSE: **601899.SH** HKEX: **2899.HK**

2022

Zijin Mining Group Co., Ltd.*

2022 Environmental, Social and Governance Report

Zijin Mining's Lakkor Tso Salar

* For identification purpose only

Providing the Materials that Improve Standards of Living in a Low Carbon Future

https://www.zijinmining.com/

CONTENT

Providing the Materials that Improve Standards of Living in a Low Carbon Future

About this Report

The Environmental, Social and Governance Report (hereinafter referred to as the "Report" or "ESG Report") of Zijin Mining Group Co., Ltd.* (hereinafter referred to as "Zijin Mining", "the Company" or "We") describes Zijin Mining's environmental, social and governance methodology and performance in 2022.

Reporting Entity:

The organisational boundaries of this Report are determined by the principle of the operational control method, which covers all companies whose operations are under the actual operational control of the Company (hereinafter "subsidiaries") .

Reporting Cycle and Reporting Scope:

1 January to 31 December 2022 (hereinafter referred to as the "reporting period"). In order to enhance the comparability and forward-looking nature of this Report, some of the contents may contain retrospective information or forward-looking descriptions as appropriate.

The release frequency of this Report is once a year, which aligns with the financial year.

Basis of the Report:

This Report has been prepared in compliance with the following:

-The "Guidelines for Environmental Information Disclosure of Listed Companies on the Shanghai Stock Exchange (SSE)" and "the Guidelines for the Preparation of the "Report on the Fulfilment of Social Responsibilities by Companies";

-Appendix 14 "The Corporate Governance Code" and Appendix 27 "Environmental, Social and Governance Reporting Guide" of the "Main Board Listing Rules" published by the Hong Kong Stock Exchange (HKEX);

-The Global Reporting Initiative (GRI) Sustainability Reporting Standards 2021;

With reference made to the followings:

-Sustainability Accounting Standards Board (SASB) Metals and Mining Industry Standard;

-Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD);

-The "China Corporate Social Responsibility Report - Corporate Social Responsibility Preparation Standard CASS-CSR4.0 - General Mining Industry" of the Chinese Academy of Social Sciences;

-The United Nations Sustainable Development Goals (UN SDGs);

-Ten "Principles of the United Nations Global Compact (UNGC)" ;

-The "United Nations Guiding Principles on Business and Human Rights (UNGPs)" ;

-The "United Nations Convention against Corruption" ;

-The "Universal Declaration of Human Rights" ;

-The "United Nations Framework Convention on Climate Change" ;

-The "Paris Agreement" ;

-The "Voluntary Principles on Security and Human Rights" (VPs) ;

-The Organisation for Economic Co-operation and Development (OECD) "Guidelines for Multinational Enterprises" ;

-The ILO "Declaration on Fundamental Principles and Rights at Work" ;

-The World Gold Council's "Responsible Gold Mining Principles" (RGMPs).

Data Source and Description:

The data in this Report comes from Zijin Mining's internal original records, corporate documents, and audit reports, and some financial data comes from the Company's 2022 annual report, which has been audited by Ernst & Young Hua Ming LLP. Unless otherwise specified, all currencies in this Report are in Renminbi (RMB).

Data Assurance:

The data and textual information in this Report have been verified by an international independent third-party verification agency - TÜV SÜD Certification and Testing (China) Co., Ltd. in accordance with AA1000ASv3 assurance standard, and a verification statement has been issued.

Review and Release:

This Report has been unanimously approved by the Board of Directors of Zijin Mining and released in both printed and electronic versions. The electronic version may be downloaded and/or browsed on the official websites of the SSE, HKEX and Zijin Mining's Sustainability Section.

Language of the Report:

This Report is printed in both Chinese and English. In the case of any discrepancies, the Chinese version shall prevail.

1.This Report mainly discusses the ESG practices and performance of various projects under Zijin Mining's actual operational control, but we have noticed that various stakeholders are highly concerned about some projects, such as the Porgera Gold Mine located in Papua New Guinea and the Kamoa-Kakula Copper Mine located in the DR Congo, which are neither under our actual operating control nor included in this Report. Although we are not in actual operational control, as a shareholder, we are highly concerned about the operating performance and ESG performance of these projects, and use our rights as a shareholder to actively promote their operations in a responsible manner. The ESG information about these projects is disclosed to the public after being jointly reviewed and approved by Zijin Mining and the other shareholders of the projects. All stakeholders can refer to the ESG reports and annual reports of the actual operating controllers of the projects for more comprehensive information.

Foreword

In the past year, the Company has enhanced its global vision and international standards, vigorously building its global competitiveness. We have initially established an international operation management system in accordance with the requirements of Streamlining, Compliance and Efficiency, with the concept of green sustainable development and ESG deeply rooted throughout the process of corporate development. In the future, the Company will continue to follow the requirements of Streamlining, Compliance and Efficiency to complete the development of the global operation management system. Guided by Zijin's innovative concept, mining engineering management model and Zijin spirit, the Company will ensure its main economic indicators and ESG key performance are met to step up to a new level on its way to becoming a world-class mining company.

A Message from the Chairman

In the context of the increasingly severe global energy crisis, ESG has become an important yardstick for measuring the sustainable corporate development, and building an ESG system with high standards will become compulsory for first-class mining companies. As an important player in the global mining market, Zijin Mining is committed to becoming a Green, High-Tech, Leading Global Mining Company. The Company practises its concept of Lucid Waters and Lush Mountains Are Invaluable Assets and actively responds to the Carbon Peak and Carbon Neutrality goals. It strictly complies with the international standards, earnestly fulfils its corporate social responsibilities, and has laid a comprehensive foundation for green and sustainable development, continuously improving the performance of key ESG indicators and mainstream ratings, leading to a significant drop in the energy consumption per unit of industrial added value and carbon emission intensity. Eco-environmental protection has become the highlight of Zijin's global development, with remarkable results in the development of the Company's safety and health management system and significant improvement in intrinsic safety. With much enhanced awareness of legal compliance, our corporate governance system has become more efficient and better coordinated.

Zijin Mining's first phase of the "Three-Step" goal in the new decade has been completed beyond expectations, with the Company's main economic indicators showing that it is now in the first echelon of global mining companies. At present, the Company is in the critical second phase of implementation of its strategy of building a Green, High-Tech, Leading Global Mining Company. To take advantage of the new situation, seize new opportunities, build a new strategic framework, and achieve new development, we held a forum on the principles for strategic development in early 2023 and released important guideline documents such as the Company's "Outlines of Three-Year (2023-2025) Plan and Development Goals for 2030" and "Climate Change Action Plan", which provide a great overall blueprint for Zijin Mining's green, low-carbon, high-quality and sustainable development.

- We are committed to Providing the Materials That Improve Standards of Living in A Low Carbon Future. Mining is a key industry that promotes the transition of human society from old to new kinetic energy and the continuous advancement of the economy and society in the post-pandemic era. We embrace the global low-carbon transition and clean energy revolution, and research and apply energy-saving, low-carbon, and emission-reduction technologies to build a mining model for green, intensive, and cyclical development with the "Five-Stage Life-of-Mine Project Management Procedure by In-House Capabilities". We produce copper, lithium, and other strategic Low-Carbon Mineral Raw Materials to continue providing the materials that improve standards of living in a low carbon future. In 2022, the Company has cumulatively produced 880,000 tonnes of mine-produced copper, 56 tonnes of mine-produced gold, 440,000 tonnes of mine-produced zinc (lead), and 387 tonnes of mine-produced silver, making us the fastest-growing large mining company in the world in copper production. We have a number of large high-quality copper, lithium and other mines with global influence, with mineral resources including 73.72 million tonnes of copper, 12.15 million tonnes of lithium carbonate equivalent, 3,117 tonnes of gold, 11.18 million tonnes of zinc (lead), and 14,600 tonnes of silver. These constitute an important material foundation for our contribution to global green and low-carbon technology and industrial transition.

- We have made a solemn commitment to reaching carbon peak in 2029 and carbon neutrality in 2050. The Company's "Climate Change Action Plan" represents our major strategic decision to further commit our responsibility for building a community with a shared future for mankind, which will help Zijin contribute to achieving the goal of limiting the global temperature rise to within 2 °C. We will fully optimise our green energy structure with aim to use renewable energy that accounts for more than 30% by 2030. We will gradually reduce the greenhouse gas emission intensity so that the greenhouse gas emissions per unit of industrial added value will decrease by 20% in 2025 and by 38% in 2029, compared to the baseline year of 2020. We will protect biodiversity along with green ecological environments that include mountains, rivers, forests, fields, lakes, grasslands and deserts like our own eyes. At present, the number of our national-level "Green Mines" has increased to 13 and the number of our national-level "Green Factories" has increased to 5. They constitute Zijin's unique way to explore a new pattern of harmonious coexistence between mining and nature.

- We adhere to the concepts of Mining for a Better Society and Common Development. We integrate governance with corporate management and control in a profound way, keeping our focus on key issues such as environment, ecology, water resources, labour, human rights, security, community, business ethics, anti-corruption, responsible supply chain and corporate governance throughout the entire process of mining development activities, to achieve a virtuous cycle with environmental, social and corporate benefits. We attach great importance to the working environment and development space of our employees, with constant red-line thinking and bottom-line awareness, continuously improving the level of safety production and occupational health. We have localised and diversified employment strategies in place, and respect the rights and interests of employees of different nationalities, cultures, races, and genders as they grow together with Zijin. We share weal and woe with the local community and people where our subsidiaries are located, and actively work with them in various areas of construction, such as science, education, culture and health, and have been highly appreciated by the host countries and the local people.

In the face of great changes unseen in a century, the challenges brought to mankind by economic, social, and climate changes are real, severe and long-term. We are more profoundly aware that human beings have only one earth and one world, and that enterprises, the society and the environment are so closely related that they form an inseparable Community with A Shared Future. As a responsible and visionary large international mining company, we shall regard Improving Quality, Reducing Cost, and Boosting Profitability as our general work guideline, with a focus on the field of green mineral raw materials, to drive for better innovation-driven, technology empowerment, talent effect and ESG green development that are intrinsically required and continue to transform mineral resources into the basic means of production and living required for the development of human civilisation.

We will continue to improve the performance of key ESG indicators, promote the implementation of Zijin's "Climate Change Action Plan", increase investment in the new energy and advanced material industries, and accelerate natural carbon sinks, low-carbon transition, and green power and green energy applications. We will set more development examples for green and sustainable mines and strive to build an international ESG system and brand with Zijin's characteristics. We will vigorously promote our stakeholders' value of Value Creation and Common Development to contribute to the well-being of the countries, the community and stakeholders where our subsidiaries are located, so that the society and stakeholders can benefit from the presence of Zijin Mining and turn over a new page in the development of a community with a shared future for mankind!

Zijin Mining Group Co., Ltd.*
Chairman, Chief Officer of the Strategic and Sustainable Development (ESG) Committee
Chen Jinghe

A Message from the Director of the ESG Management Committee

In 2022, under the leadership of the Company's Board of Directors and the Strategic and Sustainable Development (ESG) Committee, Zijin Mining successfully concluded the first phase of the new 10-year development plan up to 2030. It has not only achieved leaping growth in operating performance, but also greatly improved key ESG indictors and overall level, with the green and high-quality development showing a big leap forward to a new level. Our position in the global industry and our image as a responsible company have been further improved.

We have preliminarily established an ESG system with green and sustainable development as its characteristics. Our ESG work has become more prominent in the Company's key strategies. We keep our focus on the ESG strategic objectives for sustainable development and further improvement of our working mechanism and work organisation. Our pragmatic ESG practice with Zijin's characteristics has been carried in depth, while the Company's compliance and risk control capabilities have been significantly enhanced. We have significantly improved quality in ESG information disclosure. Our international mainstream ESG ratings have steadily improved while our domestic mainstream ESG ratings have maintained the leading position in the industry. We have won many important awards in the ESG field at home and abroad, indicating that our responsible ESG practice has won a high level of recognition from all sectors of society.

We adhere to the lofty mission of providing the materials that improve standards of living in a low carbon future. With positive actions, we are in the process of full implementation of the Company's "Climate Change Action Plan" to achieve our goals of carbon peak in 2029 and carbon neutrality in 2050. To this end, our comprehensive efforts in energy conservation and emission reduction are in full swing, with a continuous increase in natural carbon sinks and vigorous development in renewable and clean energy. Our photovoltaic and hydroelectric power generation has seen a significant increase, and important phased results have been achieved in the research and development and industrial application of ammonia-hydrogen zero-carbon energy technology. We adhere to the notion of seeing "The Blueprint for Whole-Life-Cycle", implementing the concept of green environmental protection in the whole life cycle of mine development. We promote practical environmental restoration and governance and biodiversity conservation while strengthening comprehensive resource recovery and promoting the reduction and harmless disposal of gaseous, liquid and solid wastes and their re-utilisation. We have 13 national-level "Green Mines" and 5 smelters are honoured with national-level "Green Factories". Our experience in green mines continues to apply to our overseas subsidiaries, resulting in the first modern green mine in their host countries, including Čukaru Peki Copper and Gold Mine (Serbia), Kolwezi Copper Mine (Democratic Republic of the Congo), and Buriticá Gold Mine (Colombia), indicating that we have been truly living up to our environmental protection concept of Lucid Waters and Lush Mountains are Invaluable Assets. On the other hand, we have firmly grasped the trend of the new energy revolution, rapidly promoting "Two Lakes and One Mine" lithium resource projects and the development of new energy-related materials, in an effort to become a critical player in the global green and low-carbon transition.

Our priorities are given to the life, health and safety of the employees of our companies and partners. As such, we continue to increase our investment in safety, promote advanced technology and equipment, improve the level of digitalisation, automation, and intelligent systems, to consolidate the foundation for intrinsic safety. Strengthening safety management system with Zijin's characteristic, we improve the qualifications of all employees and their safety skills and train a safe workforce with an intrinsic sense of safety, reinforcing the dual responsibility system for each position and the safety accountability system for all employees. We also strengthen the grid management of safety operations, with enhanced integrated management of our contractors. Our foundation and level of safety management have been significantly improved, resulting in a significant reduction in lost time injury rate and total recordable incident rate. Underlying our corporate culture is safety, which has been further placed in a position of great importance.

Continuing to improve the Be Value Creator-oriented global human resources system, we strive to provide employees with respected jobs and create various conditions to promote their career development so that they grow along with the Company. We respect our employees' nationality, race, gender, religious belief and cultural background difference, and are actively building a diversified and international talent structure, with the focus on promoting local employment and talent training and attracting outstanding talents to join the management of subsidiaries. We care for the physical and mental health of our employees, providing them with effective psychological counselling and humanistic care as they are dispatched and stationed in remote places and harsh environment for an extended period of time, while providing assistance to their families as much as possible. There has been a continuous increase in our employees' sense of belonging, sense of gain, and sense of happiness.

We make a great effort to practise our mission of Mining for a Better Society and the concept of Common Development, always taking into account the interests of the governments of the host countries (regions), the local communities, all stakeholders and partners and advocating joint creation of value for common development. While creating a large number of employment opportunities and promoting the economic development of the host areas of our subsidiaries, we strive to promote the organic integration of Zijin's culture and the local culture, and organise and implement a series of social welfare projects, providing robust support for the infrastructure, culture and education, medical and health care, sports and health, industrial development, and skill improvement, continuously promoting the well-being of the local people. All this has won wide recognition and praise from all walks of life. Our responsible corporate image and reputation have been further improved.

At the beginning of 2023, Zijin Mining released the "Three-Year (2023-2025) Plan and Outline of Development Goals for 2030", which defines our strategic goals and key measures, starting a new era in the development of a Green, High-Tech, Leading Global Mining Company. We will adhere to the bottom line of respecting nature, cherishing life, respecting the law, and pursuing civilisation, as well as to green, safe, common and harmonious development. Strictly following international standards and industry norms, we will reinforce our ESG concepts in both spirit and action, further improving ESG management capabilities and performance, to demonstrate our social morality and responsibility as a large multinational company. Zijin Mining will continue to strengthen its global competitiveness and influence, and work with suppliers, contractors and other stakeholders to achieve innovative breakthroughs in high-quality sustainable development, and contribute wisdom and strength to the realisation of human well-being.

Zijin Mining Group Co., Ltd.*
President, Director of the ESG Management Committee
Zou Laichang

2022 Highlights

Governance

Percentage of female directors increased to

15.4%

Percentage of non-executive director and independent directors reached

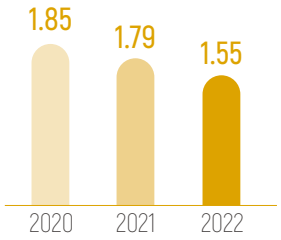
Board of Directors' review of ESG-related proposals accounted for

Climate Transition

Ratio of renewable energy consumed

16.21%

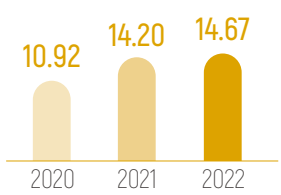
GHG emissions intensity by industrial added value (tCO_2e/RMB10,000) ↓13.4%



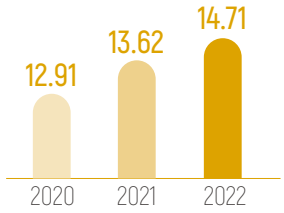
Issued "Climate Change Action Plan" in accordance with TCFD' s framework

Planet

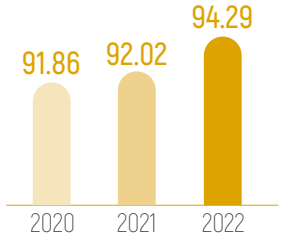
Investment in environmental protection (RMB100 million) ↑3.3%



Non-hazardous waste comprehensive utilisation rate (%) ↑8%

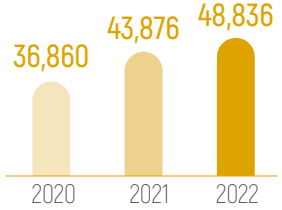


Water re-use rate (%) ↑2.5%

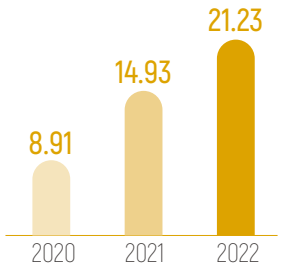


People

Number of employees ↑11.3%



Investment in production safety (RMB100 million) ↑42.2%



Total recordable incident rate (TRIR) (per million hours worked) ↓5.9%

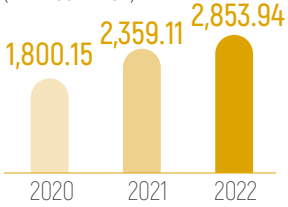
0.64

Lost time injury rate (LTIR) (per million hours worked) ↓3.3%

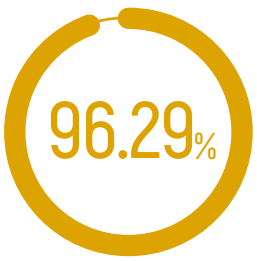
0.29

Society

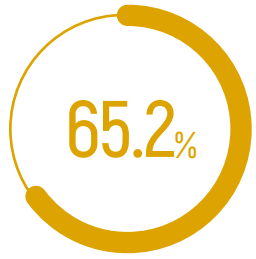
Direct economic contribution (RMB100 million) ↑21.0%



Local employment rate



Local procurement rate



About Us

Business at a glance

As a large multinational mining group, Zijin Mining is engaged in the global exploration and development of metal mineral resources, including copper, gold, zinc, and lithium, and also involves in engineering design, technology application research, smelting and processing, trade, and finance, encompassing a complete industrial chain. We have expanded our industrial framework of new energy and advanced materials, forming the "Two Lakes and One Mine (the Tres Quebradas Salar, Lakkor Tso Salar and Xiangyuan Lithium Mine)" lithium resource structure to accelerate electrification transition and the development of clean energy, including photovoltaics, wind power, and hydraulic power. By doing so, we promote the strategic Environmental Protection + New Energy transition. With the goal of building a Green, High-tech, Leading Global Mining Company, we continue our exploration and exploitation of key minerals in the low-carbon industry, ensure the safety and stability of the mineral supply chain, and empower the global green and low-carbon circular economy.

The Company has established a comprehensive scientific research system and research institutions and has a unique innovative development concept

and the advantages of independent technological innovation as well as core technologies in geological exploration, hydrometallurgy, comprehensive recycling and utilisation of low-grade refractory resources, and large-scale engineering development, putting it in a leading position in the industry. We have a complete system of geological exploration, mining, processing, smelting, environment and science and technology, and have independent technology and engineering capabilities that form the entire industrial chain. Based on the ore flow direction, our full process control covers all the five areas of geological exploration, mining, processing, smelting, and environmental protection, leading to the "Five-Stage Life-of-Mine Project Management Procedure by In-House Capabilities", which maximises the social and economic benefits of mineral development.

Forbes

2022 Forbes Global Listed Companies

Ranked 325th

FORTUNE 500

2022 Fortune Global 500

Ranked 407th

Membership

WORLD GOLD COUNCIL

中国矿业联合会 CHINA MINING ASSOCIATION

中国黄金协会 China Gold Association

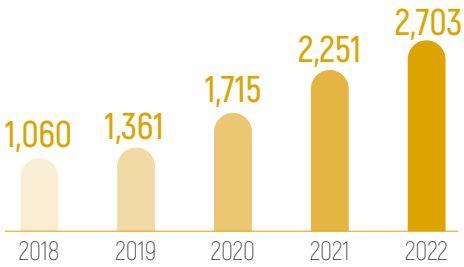
ACBASR 中国在非企业社会责任联盟 Alliance of Chinese Business in Africa for Social Responsibilities

中国有色金属工业协会 CNIA China Nonferrous Metals Industry Association

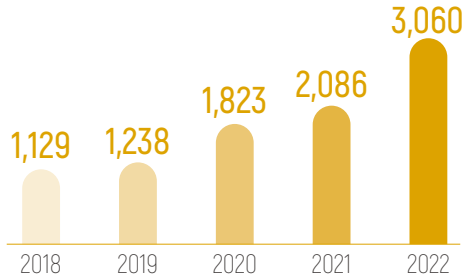
中国职业安全健康协会 CHINA OCCUPATIONAL SAFETY AND HEALTH ASSOCIATION

Economic Performance

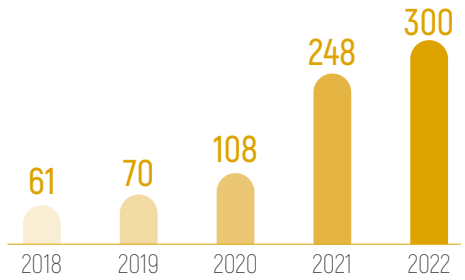
Revenue (RMB100 million) **2,703** ↑20%



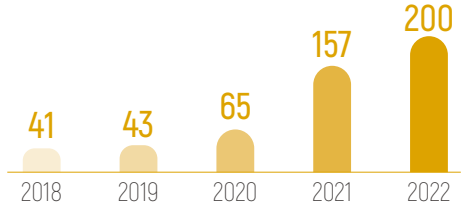
Total assets at the end of the reporting period (RMB100 million) **3,060** ↑47%



Profit before tax (RMB100 million) **300** ↑21%



Net profit attributable to owners of the parent (RMB100 million) **200** ↑28%



Zijin in the world

Zijin Mining owns important mining investment projects in 16 countries, with its core business covering copper, gold, zinc and other metals. Its resource and output of each of such mineral products rank top 10 among the listed mining companies in the world.

During the reporting period, we acquired important mining projects worldwide, including the Lakkor Tso Salar in Tibet, the Hard Rock Lithium Mine in Dao County, Hunan Province, the Haiyu Gold Mine in Shandong Province, the Rosebel Gold Mine in Suriname, the Sawaya'erdun Gold Mine in Xinjiang, and the Kharmagtai Copper-Gold Mine in Mongolia. With its successful investment in Zhaojin Mining, Zijin Mining has become its second largest shareholder. These investments allowed the Company's equity resources to increase significantly.

As of the end of the reporting period, the Company's measured, inferred and indicated and controlled as well as inferred copper resources reached 73.7186 million tonnes, gold resources reached 3,117.39 tonnes, zinc (lead) resources reached 11.1833 million tonnes, silver resources reached 14,611.80 tonnes, and lithium resources (in terms of lithium carbonate equivalent) reached 12.1521 million tonnes. The Company's copper production was 880,000 tonnes, gold production was 56 tonnes, zinc (lead) production was 440,000 tonnes, and silver production was 387 tonnes.

2022 Major ESG Honours

During the reporting period, Zijin Mining obtained the following honours:

Pioneering Organisation in ESG Disclosure Enhancement

China's Listed Company Golden Bull Award

Outstanding ESG Enterprise

Jinlan Cup ESG Excellent Case

ESG Leading Enterprise Award, Leading Social Initiative Award

Attractive Employer for Global Graduates

"Golden Responsibility Award" - Annual Sustainable Development Award, Best Social Responsibility Award

Forbes China Sustainable Development Industrial Enterprises Top 50

During the reporting period, our subsidiaries obtained the following ESG-related honours

Award Winner	Country	Honours
Zeravshan	Tajikistan	Environmental Protection Excellence Award
		Outstanding Contribution Award for the Advancement of the Mining Industry
Serbia Zijin Copper	Serbia	Bor District Outstanding Economic Contribution Award
		The Misa Anastasijevic Award
		Outstanding Business Achievement Award
Serbia Zijin Mining	Serbia	Bor District Outstanding Economic Contribution Award
Altynken	Kyrgyzstan	Excellent Environmental Protection Enterprise Award
		Labor Protection and Occupational Health Award
		Certificate of Honour for Community Contribution
Continental Gold	Colombia	Sustainability Award
Norton	Australia	Outstanding Contribution Company
Liex	Argentina	Safety Development Coordination Award
		Excellent Social Responsibility Enterprise
Tibet Julong Copper	China	Advanced Collective of Employment and Entrepreneurship
Heilongjiang Zijin Copper	China	Enterprise with Outstanding Contribution to Economic Development
		"Leader" in Enterprise Energy Efficiency
Xinjiang Zijin Non-ferrous	China	Certificate of Merit for the Development and Construction of Xinjiang
West Copper	China	Green Mine Science and Technology Award
Jinshan High-Abrasive	China	Green Foundry Enterprise
Gold Smelting Company	China	Provincial Green Supply Chain Demonstration Company

ESG Ratings

S&P Global Corporate Sustainability Assessment
Increased from 37 to **54 points**

CDP Scores
Becomes a profound supporter of the CDP
Climate Change – Upgraded from D to **B**
Water Security – Upgraded from C to **B**

Hang Seng Corporate Sustainability Index
Retains the **A- Rating**
Included in the Hang Seng (China A) Corporate Sustainability Benchmark Index for four consecutive years

MSCI ESG Rating
Upgraded from CCC to **B**

Culture and Value

Zijin Mining is committed to becoming a Green, High-tech, Leading Global Mining Company. It adheres to taking the path of green, high-quality and sustainable development, and uses high-quality, low-carbon metal mineral raw materials to contribute to the new energy revolution and the global carbon neutrality goal. We attach great importance to the protection of the Mountains, Rivers, Forests, Fields, Lakes, Grasslands, Deserts and Glaciers for the balance between intensive development of mineral resources and ecological environment protection, and we provide the mineral raw materials that improve standards of living in a low carbon future.

We deeply understand that a company is a platform that brings together shareholders, employees, host communities, and collaborative partners as an inseparable community working for a shared cause. Together, we create value and share growth benefits. The existence and development of the company are the prerequisite and foundation, but development should not come at the expense of others' interests. Instead, the Company will only grow based on compliance with laws, respect for local cultures, the support of shareholders, the efforts of employees, the help of collaborators, and the favourable environment created by communities and society.

During the reporting period, we built Zijin Mining's sustainable development model centring on our corporate strategic goals, culture, and values, and consolidated the ESG strategy and cultural system.

Green, High-tech, Leading Global Mining Company

——Providing the Materials that Improve Standards of Living in a Low Carbon Future

Purpose Mining for a Better Society + **Value Statement** Value Creation and Common Development

Organisational Strength | **Driving Force** | **Sustainability** | **Cohesion**

Our Governance

As a multinational listed company, it is vital that we operate ethically and comply with laws and regulations of the places in which we operate. Compliance is the bottom line in our business operations. We study the culture and values of our locations in depth, and are committed to being a listed company with compliance and integrity.

Our Climate Transition

The mining industry is an important drive force for mankind to move towards a low-carbon and green future. We hope that, on the one hand, we can achieve our low-carbon transition by taking the initiative to reduce emissions and upgrade our technologies and on the other hand, we can supply sufficient low-carbon metal raw materials to contribute to the global low-carbon transition, and actively address the global challenges posed by climate change and assume our responsibilities.

Our Planet

Zijin Mining believes that proactive approach can prevent negative impacts on the environment and even improve it. Therefore, we will minimise the exploitation of natural resources, reduce emissions and continue to restore vegetation to create a favourable world for life and our future generations.

Our People

We practise the People-oriented development philosophy, and strive to attract and retain talents with different cultural and academic backgrounds. We are committed to creating a diverse, fair, inclusive and safe work environment with competitive remuneration and development pathways, aiming to become a company that our employees can be proud of.

Our Society

Zijin Mining always adheres to the purpose of Mining for a Better Society and share our development fruits with all stakeholders. We aim to promote the economy of communities and build the responsible supply chain. We commit to driving industrial development and benefiting society and stakeholders with our presence.

Sustainable Development Goals

We believe that excellent sustainable development management capabilities are among the most important factors for us to achieve our ambitious medium- and long-term goals. During the reporting period, we formulated the "Outline of Three-Year (2023-2025) Plan and Development Goals for 2030", which defines the construction of the ESG management system as one of our core elements. On the basis of the previous reporting period, we positioned five areas as our sustainable development goals surrounding our own strategic goals and corporate culture, and mapped them against the United Nations Sustainable Development Goals (UN SDGs). This gave rise to our ESG strategic goal system, which provides guidelines for the direction of the Company's ESG efforts and practice. We will actively carry forward our ESG practice along with our internal and external stakeholders to create a sustainable future.

Our Positioning	Goals	Performance in 2022	Status[1]
Our Governance	Percentage of female directors exceeds that of female employees	Percentage of female directors reached 15.4%	✓
	Percentage of independent and non-executive directors exceeds 50%	Percentage of independent and non-executive directors reached 53.8%	✓
	No major human rights violations	No major human rights violations identified	✓
Our Climate Transition	Carbon peak in 2029, carbon neutrality in 2050	Total greenhouse gas (GHG) emissions were 7.78 million tonnes of carbon dioxide equivalent (tCO_2e)	◷
	By 2030, the proportion of renewable energy consumed will exceed 30%	Renewable energy accounted for 16.21%	◷
	By 2025, GHG emissions intensity by industrial added value will be reduced by 20% compared with 2020	GHG emissions intensity by industrial added value was 1.55tCO_2e/ RMB10,000 down 13.4% from 2021	◷

1. ✓ Completed ◷ In progress ✗ Not met

Our Positioning	Goals	Performance in 2022	Status[1]
Our Planet	With 2020 as the baseline year, all production and operation sites will have ISO14001:2015 certification by 2023	ISO14001:2015 certification coverage reached 97.5%	◷
	All mines will meet the green mine assessment standards by 2030	13 national-level "Green Mines", 1 provincial-level "Green Mines"	◷
	All smelting and processing companies will meet the green factory assessment standards by 2030	5 national-level "Green Factories", 5 provincial-level "Green Factories"	◷
	Water re-use rate shall maintain at a level of no less than 90%	Water re-use rate reached 94.29%	✓
	Water intensity by revenue shall be reduced by 10% by 2030 compared to 2020	Water intensity by revenue was 269.00 tonnes / RMB million , a decrease of 9.13% compared to 2020	◷
	100% restoration of recoverable land	100% of the recoverable land has been restored, with a total area of vegetation restored of 12.75 million square metres throughout the year	✓
	All mines will formulate and implement Biodiversity Action Plans (BAPs) by 2030	19 mines have formulated and are implementing BAPs	◷
	By 2030, non-hazardous waste comprehensive utilisation rate will have increased by 5% compared with 2020	Non-hazardous waste comprehensive utilisation rate reached 14.71%, an increase of 13.9 % compared with 2020	◷
	By 2030, the emission intensity of sulphur dioxide and nitrogen oxides by revenue will be reduced by 5% compared with 2020	The emission intensity of sulphur dioxide by revenue was 0.46 tonne/RMB100 million, and that of nitrogen oxides by revenue was 0.297 tonne/RMB100 million , representing a reduction by 41% and by 34%, respectively compared with 2020[1]。	✓
Our People	Zero fatality	1 employee and 2 contractors fatalities	✗
	Reduced number of accidents	Lost time injury rate per million hours worked (LTIR) was 0.29, and total recordable incident rate per million hours worked (TRIR) was 0.64	✓
	With 2020 as the baseline year, all production and operation sites will have ISO45001:2018 certification by 2023	ISO45001:2018 certification coverage reached 95%	◷
	100% safety training coverage for employees and contractors	Safety training coverage of 100% for employees and contractors	✓
	All employees have received at least 1 career development training	100% of employees have received professional development training	✓
Our Society	Community investment of no less than 1% of the Company's fiscal-year net profit	Community investment reached RMB455 million, accounting for 1.52% of the Company's fiscal year net profit	✓
	By 2023, the local procurement rate in the host countries will reach 70%	Local procurement rate in the host countries was 65.2%	◷
	Local employment rate remains above 95%	Local employment rate was 96.29%	✓

1. Due to the shutdown of a smelter during the reporting period, our emission intensity has dropped significantly. It is expected that the emission intensity will rebound to a certain extent after the smelter resumes production in the next reporting period

Materiality Assessment

Stakeholder Engagement

We respect the demands of our stakeholders, and based on the principles of integrity, interaction, equality, and transparency, we continue to improve the stakeholder participation mechanism and the ways of communication, to understand their demands, so as to clarify the Company's ESG strategy and important ESG issues, enabling our stakeholders to effectively participate in the Company's ESG governance.

During the reporting period, we followed international standards and guidelines related to stakeholder communication, such as the Global Reporting Initiative (GRI) Standards 2021 and the AA1000 Stakeholder Engagement Standard (AA1000SES), to record, measure and review our communications with stakeholders on a regular basis. We improve the communication mechanism in a timely manner based on the feedback from our stakeholders, thereby continuously improving the effectiveness and timeliness of our communication with our stakeholders.

Stakeholders	Employees	Shareholders and Investors	Business Partners	Government and Regulatory Authorities	Surrounding Communities and Environment	Non-governmental Organisations : (NGOs), Media, and Research and Education Institutions
Concerns	· Human rights protection · Remuneration and benefits · Occupational health and safety (OHS) · Equal rights and development	· Steady operation · Sustainable development · Good governance · Information transparency	· Occupational health and safety (OHS) · Business ethics · Openness and transparency	· Compliance · Paying tax according to law · Economic development · Boosting employment	· Human rights protection · Community development · Climate change · Water resources management · Biodiversity · Emissions management	· Responding to climate change · Business ethics · Openness and transparency · Water resources management · Human rights protection · Biodiversity
Way of communication	· Workers congress · Conference and training · Bulletin board, the Company's intranet · Employee satisfaction survey	· Annual general meeting · Performance announcement conference · Information disclosure · Investors' communication platform	· Contractor trainings · Suppliers' conferences	· Stock exchange meetings · Government meetings · Information disclosure platform · Government visits	· Community engagement · Mine open day · Environmental protection cooperation · Mining project kick-off meetings · Media interview	· ESG reports · The Company's official website
Response and performance	· More than 92% of employees understand the Company's vision and goals · More than 87% of employees agree with the Company's development	· 2 general meetings of shareholders, 103 roadshows and online exchange sessions · 29 ESG-themed special exchange sessions with investors and shareholders	· 1,547 new suppliers were screened using ESG criteria	· Local employment rate: 96.29% · Local procurement rate in the host countries: 65.2%	· Our subsidiaries received 1,879 visits by our stakeholders to promote community meetings, community opening, government and media visits and other activities	· Participated in COP15 side event of "Mainstreaming Biodiversity Conservation in China's Mining Investment and Practice" to share the Company's biodiversity conservation practices

How We Engage with Our Stakeholders

Materiality Analysis

During the reporting period, we conducted materiality analysis based on the dual materiality analysis process of the Global Reporting Initiatives (GRI) and Zijin Mining's business characteristics, thereby identifying the most important sustainable development issues for the Company. To ensure the continuity and readability of this Report, we have also referred to the materiality of each important topic in our previous reports and converted the results of previous years into a certain coefficient to adjust the analysis results of this year. Finally, 8 highly material topics have been identified, with which the reporting boundaries of this Report were determined and approved by the Board of Directors.

Process to Identify this Year's Report Topics

Screening the Topics	21 highly-relevant topics were identified based on international initiatives and standards, investment and rating agencies, and corporate development goals
Impact Analysis of the Topics	For the identified highly-relevant topics, a risk-based approach was adopted to assess the actual and potential impact of Zijin Mining on these topics and the actual and potential impact of these topics on Zijin Mining
Identifying the Stakeholders	According to business characteristics and operational conditions, 8 categories of stakeholders were identified
Questionnaire	Through online research and field study, about 1,000 questionnaires were distributed in subsidiaries, of which 937 questionnaires were received, covering 16 countries/regions in 5 continents worldwide
Prioritising the Topics	Based on the survey results, the levels of concern of stakeholders about various topics were identified. Based on the results of the impact analysis of the topics, 8 high-materiality topics were identified, which were also the focus of the corporate risk management.
Determining the Reporting Boundaries	Based on the identified important topics, the key contents to be reported in this Report were determined

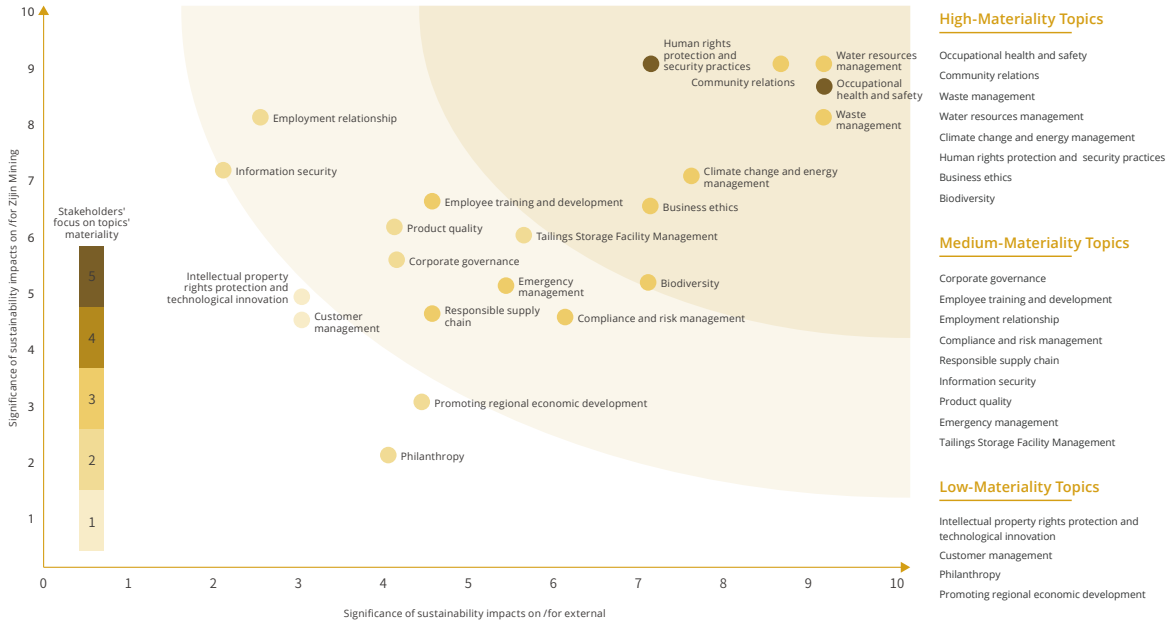
Compared with 2021, our material topics this year underwent certain changes:

On the one hand, we merged a number of highly-relevant small topics into new major topics for the coordinated management of multiple topics to improve governance efficiency. This included merging "epidemic prevention and control" into "occupational health and safety", "freedom of association and collective bargaining", "legal employment", and "indigenous rights" into "human rights protection and security practices", and so on.

On the other hand, as the management of relevant topics became more mature, the focus of the stakeholders' attention changed, and their importance was adjusted accordingly. As our Environmental Management System (EMS) was gradually improving, our stakeholders were turning their attention to specific water and tailings management performance. Even though we would reflect the role of the EMS in various specific environmental topics, the EMS was no longer considered as a separate material topic.

At the same time, the materiality level of some of our material topics was also adjusted. Based on the increase in the level of digitalisation in our globalisation process, the information security risks we faced continued to increase and now had a medium level of materiality. As the management system for employee training and development and the promotion of regional economy was currently mature, its downward adjustment of materiality was a downgrade relative to the increase of materiality of other topics, and our actual management did not change.

Materiality Matrix



Our Governance

We regard compliance with laws and regulations as the cornerstone of sustainable development and adhere to the laws and regulations of the host countries and regions, including the "Company Law of the People's Republic of China," the "Securities Law of the People's Republic of China," the "Code of Corporate Governance for Listed Companies," the "Shanghai Stock Exchange Stock Listing Rules," the "Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited" and other relevant requirements.

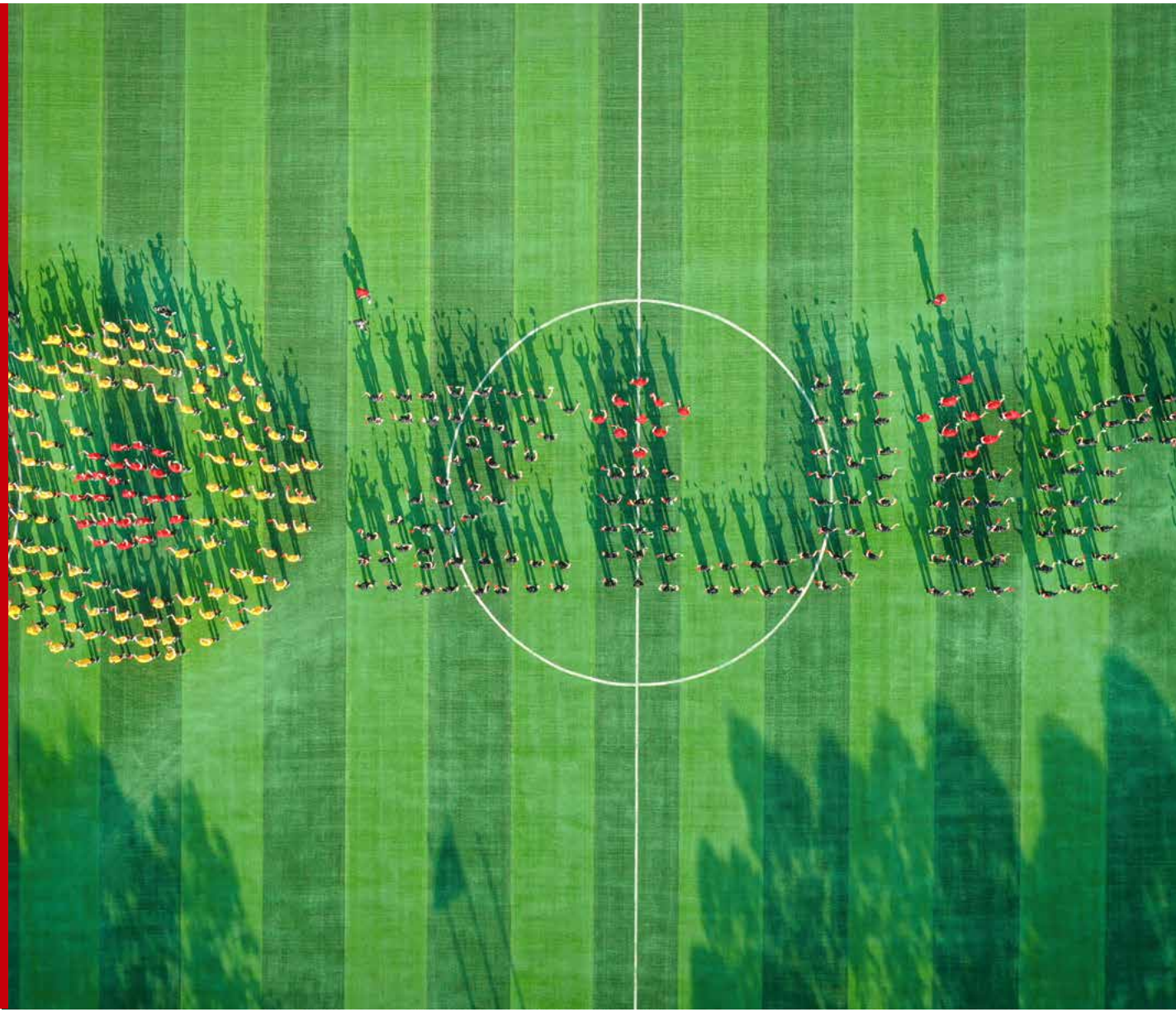
2022 Key Performance

Percentage of non-executive directors and independent directors
53.8%

Percentage of female directors
15.4%

Proportion of ESG-related proposals on the proposals reviewed by Board of Directors
25.6%

ESG factors account for executive compensation assessment
20%



Corporate Governance

Zijin Mining is committed to improving the quality of governance with a global perspective. We respect international standards and excellent industry practices such as the "Ten Principles of the United Nations Global Compact", "the United Nations Guiding Principles on Business and Human Rights", "the United Nations Convention Against Corruption", and "the Principles for Responsible Gold Mining", and deeply integrate the ESG governance concept with our corporate reality to build a governance model that not only conforms to international standards but also retains Zijin's characteristics. The Company adheres to Zijin's corporate culture concept characterised by common development. We respect the opinions and voices of all shareholders, investors, employees, collaborators and other stakeholders, and create strong creativity and execution capabilities through aligned and effectively-synergistic collaboration, which serves as an important prerequisite and assurance for the Company's governance practices.

Governance Structure

Zijin Mining has a well-established and sustainable governance structure. The Company's ownership has been basically separated from its management rights, with the general shareholders' meeting, the Board of Directors, the Supervisory Committee, and the management each bearing their respective duties and responsibilities. They work in synergy with a high level of complementarity and coordination in terms of the direction of governance, decision-making, supervision, and implementation. During the reporting period, the Company completed the election of its new Board of Directors, Supervisory Committee and management, with most of the member in their seventh term being retained, which ensured the continuation and smooth implementation of its corporate strategy. The Company has also absorbed younger professionals with more diverse backgrounds into the management, including Mr. Wu Jianhui and Ms. Wu Xiaomin into the Board of Directors, Mr. Qiu Shujin and Ms. Lin Yan into the Supervisory Committee, and Mr. Wang Chun and Mr. Liao Yuanhang into the management.

The general meeting of shareholders is the highest authority in Zijin Mining. The Company convenes it in strict accordance with the requirements of the "Articles of Association" and the "Procedural Rules for the Company's General Meeting of Shareholders". All shareholders of the Company, especially those of the minority shareholders, can enjoy equal rights and fully exercise their voting rights.

The Supervisory Committee is the supervisory body of the Company, consisting of 5 supervisors, 2 of whom are Supervisors representing workers and staff who are elected at the Meeting of Representatives of Workers and Staff. The Board of Supervisor convenes its meetings on a regular basis and diligently exercise its duties with a sense of responsibility to the shareholders. It supervises and inspects the performance of duties by the directors and senior executives as well as the legality and compliance of the Company's finances, to safeguard the legitimate rights and interests of the Company and shareholders.

The Board established a comprehensive decision-making mechanism and is charged with the power of operation and decision-making, with the special committees under it, including: The Strategic and Sustainable Development (ESG) Committee, the Execution and Investment Committee, the Audit and Internal Control Committee, and the Nomination and Remuneration Committee. The Board of Directors reviews the Company's annual goals and progress in terms of environment, society and governance at the end of each year, and reports the progress to the entire Company at the Company's annual work meeting at the beginning of the next year. Based on the progress, it arranges key tasks and targets for ESG work in the next year. During the reporting period, the Board reviewed and discussed a total of 172 proposals or issues, of which 44 were directly related to ESG.

Introduction to the Committees under the Board of Directors

- **The Strategic and Sustainable Development (ESG) Committee** is composed of 9 directors, including 5 executive directors, 1 non-executive director, and 3 independent non-executive directors. The Committee is mainly responsible for analysing the global economic and industry trends, studying the Company's development strategy and providing opinions and suggestions on the Company's medium- and long-term development strategies, external public policies, and sustainable development and environmental, social and governance policies, etc. During the reporting period, the Strategic and Sustainable Development (ESG) Committee studied and revised the Company's "Outline of Three-Year (2023-2025) Plan and Development Goals for 2030, and compiled the "Second Phase Plan for Deepening Reform" and "Climate Change Action Plan". It also upgraded the Core Concept System of the Corporate Culture, laying a solid foundation for the Company's sustainable development. In addition, the Committee also set up a leading group for carbon peak and carbon neutrality management, which is in charged with the coordination of the Company's carbon peak and carbon neutrality management and the review of the decarbonisation of upstream and downstream companies in the industrial chain. It regularly reviews and assesses the risks and opportunities in connection with the Company's carbon peak and carbon neutrality to address climate change and adapt to the energy transition.

- **The Execution and Investment Committee** is a standing executive and investment organ under the authorisation of the Board. It performs the duties of the Board of Directors as authorised by the Board, is accountable to the Board of Directors. During the reporting period, the Committee strengthened research and investment in new materials and new energy mineral resources within the scope authorised by the Board. It reviewed and approved projects that included "Zijin Lithium's Project of 20,000 Tonnes/Year of Battery-grade Iron Phosphate", the "Longking Investment Project of Lithium Iron Phosphate Energy Storage Cells with an Annual Production of 5GWh," "Acquisition of Shares in Hainan International Carbon Emissions Trading Centre," and the "Fujian Zijin New Energy Shanghang County Roof Photovoltaic Project" and the Fujian Zijin New Energy Shanghang County Roof Photovoltaic Project". With the approval of these projects, the Company promoted energy transition and completion of "carbon peak and carbon neutrality".

- **The Audit and Internal Control Committee** is responsible for the communication, supervision and verification of the Company's internal and external audits, internal control and risk management systems. During the reporting period, the Audit and Internal Control Committee carefully reviewed the Company's annual report, interim report and quarterly reports, and provided its review opinions. The Committee also organised risk reminders and meetings for the communication on management recommendations.

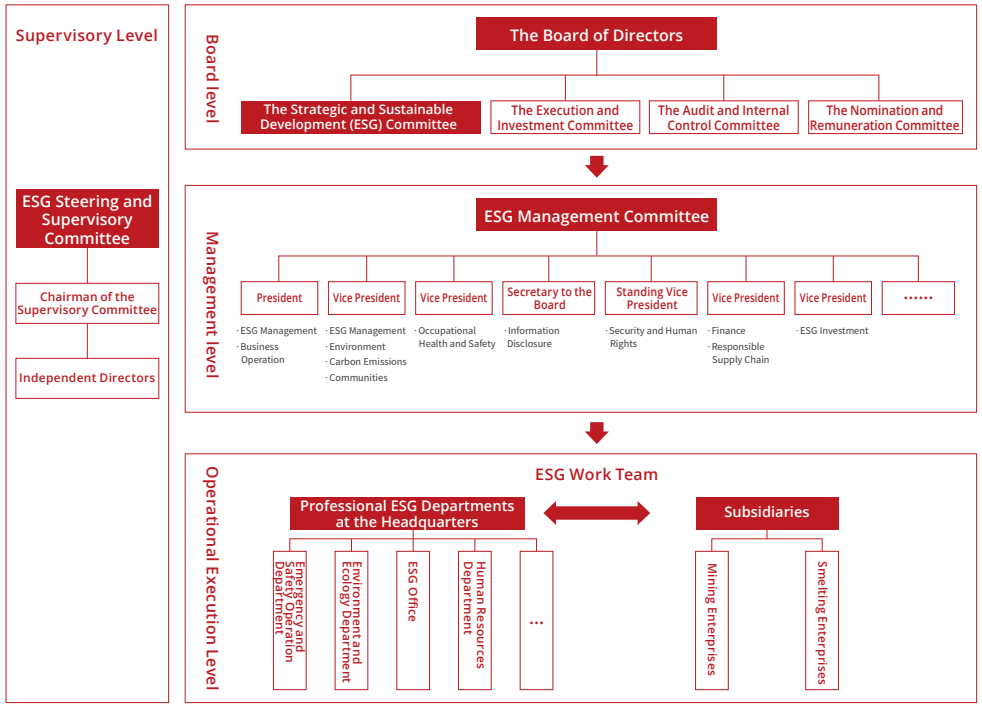
- **The Nomination and Remuneration Committee** is responsible for reviewing and making recommendations on the candidates for directors and management, selection criteria and procedures. It formulates and reviews remuneration policies and plans for the directors and management, and formulates assessment criteria for directors and management and conduct assessments. During the reporting period, the Nomination and Remuneration Committee reviewed and approved the 2022 annual remuneration plan for the Company's directors and executives, and nominated Ms. Wu Xiaomin as the candidate for the Company's independent director.

ESG Governance System

The Company has established a top-down ESG management structure led by the Board as well as an ESG management committee at the management level, with the President of the Company as its director. The members of the Committee include the president, vice presidents and other senior management who are highly professional and diverse and who are in charge of ESG topics such as safety, environmental protection, business ethics, community relations, supply chain, product quality, and labour relations. They effectively promote and implement the ESG strategic work formulated by the Board and its subordinate committees and improve ESG performance.

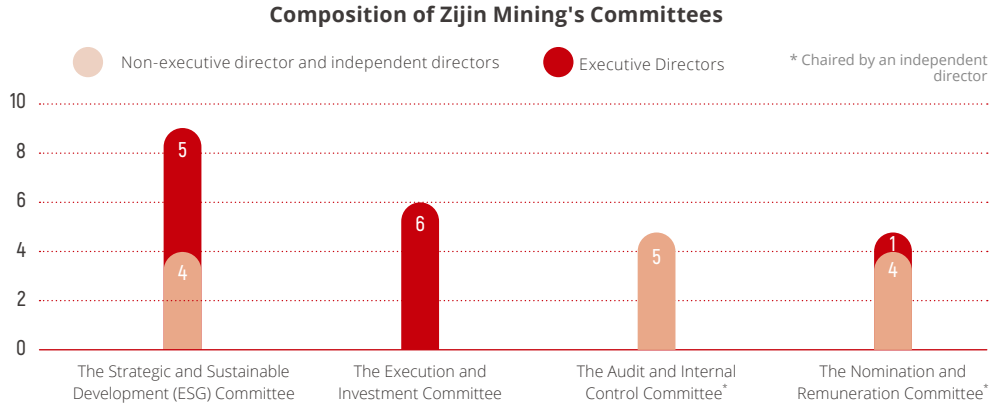
To further strengthen the effectiveness of ESG work, during the reporting period, the Company set up an ESG office in its headquarters, forming a network of overall ESG management with the ESG specialists of its subsidiaries. The professional departments of the headquarters and those of the subsidiaries have formed their own professional network of ESG management. Relying on the working group networks, we effectively delegate the ESG strategic goals and promptly deliver policy requirements to all levels, and have formed a dynamic and effective mechanism for risk prevention and communication that leads to great ESG practice.

Under the guidance of the ESG Management Committee, during the reporting period, the Company introduced a third-party ESG pilot audit on the two subsidiaries in Serbia to identify the impact and major risks of our operations and improve our practice, based on the environmental and social sustainability performance standards of the International Finance Corporation (IFC), the Ten Principles of the International Council on Mining and Metals (ICMM), and the principles for international advanced practices. The audit covered areas that included labour conditions, environment, safety, community, and human rights. In the future, the Company will gradually expand this third-party ESG audit to audit the risks that exist in each subsidiary.



Independence

The Company's establishment of independent directorship provides necessary checks and balances for the effective operation of the Board and ensures that the Board exercises its leadership that is independent from the management. The Company's Board has 6 independent directors and 1 non-executive director, accounting for about 54% of the directors. During the reporting period, the Company revised the "Rules on Work for Independent Directors" and established a convener of independent directors. Of the 4 special committees under the Company's Board, the Audit and Internal Control Committee and the Nomination and Remuneration Committee are both chaired by independent directors. Possessing their professional expertise, the independent directors put forward their opinions on major issues such as company strategy, standardised operation, operation management, and internal risk control at the general meeting of shareholders, the Board and special committees, forming checks and balances within the Board which lead to the improvement of the scientific and professional nature of the Board's. The independent directors do not hold positions other than as directors in the Company.



Case

Supervisory Committee of Zijin Mining was Elected into the "List of the Boards of Supervisors of Listed Companies with the Best Practice"

In 2022, Zijin Mining's Supervisory Committee was elected into the “List of the Boards of Supervisors of Listed Companies with the Best Practice” by the China Association for Public Companies, as the only company from the mining industry that was included in the list. Election into the list was based on the evaluation of 45 indicators related to the statutory functions of the Supervisory Committee including what is involved in its performance of duties, supervisory approach, and application of supervision results, which aim to give full play to the role of the boards of supervisors of listed companies and promote their standardised performance of duties.

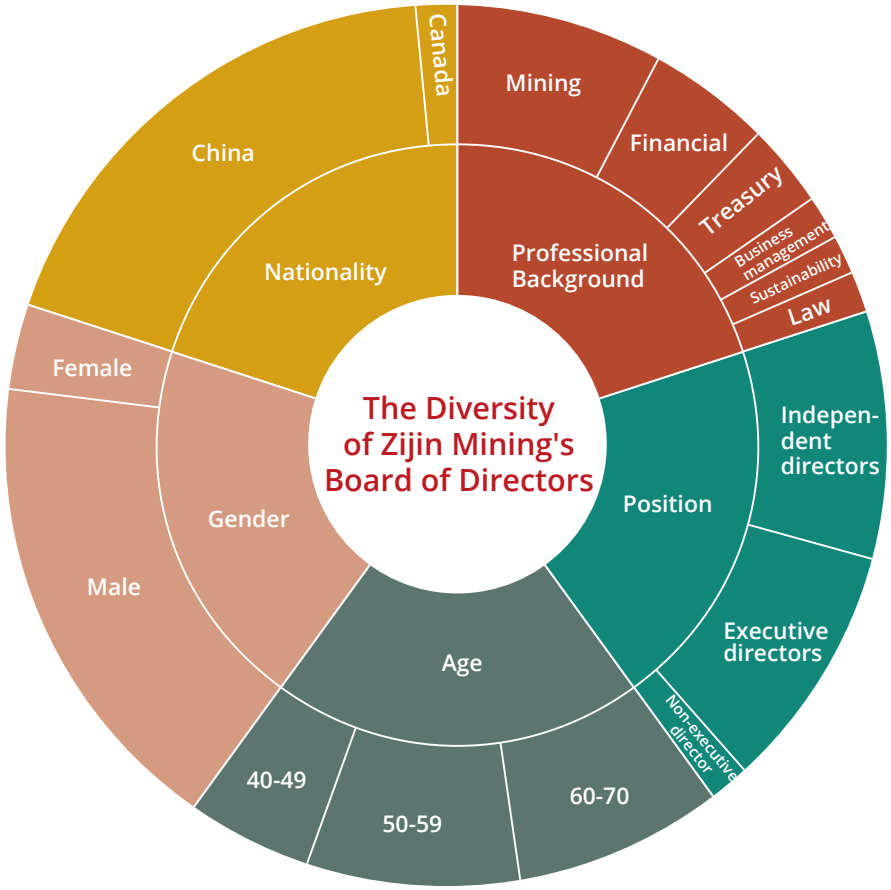
The Supervisory Committee of Zijin Mining was elected into the "List of the Boards of Supervisors of Listed Companies with the Best Practice"

Remuneration

It is of great significance to strengthen the responsibilities of the Board on the Company's ESG topics and set the tone for the sustainable development, and to improve the Company's ESG governance system. The Company places an emphasis on the principles that Remuneration is Commensurate with the Company's International Standing in the Industry; Performance and Shareholder Returns; Personal Responsibilities, Contributions and Performance; the Company's Market Value and Market Performance; and the Sustainable Development and ESG Indicators. This served as the basis for the remuneration and assessment plans for the directors, supervisors, and executives for the new term. Constituting not less than 20% in the assessment for the annual incentive salary, the ESG indicators cover the environment, safety, society, governance, ESG major events, ESG ratings and other key indicators setting and corresponding weights, and will be subject to floating assessment coefficients in the collective and individual evaluations.

Diversity

The diverse backgrounds and experiences of the members of the Board make it possible for them to provide different perspectives and values for corporate strategic planning, allowing the committees to assess issues from a broader perspective, taking into account the best interests of all stakeholders. The Company follows the international ESG governance philosophy and increases the diversity of the Board and the Supervisory Committee. The number of female directors in the new term of the Company's Board has increased to 2, raising their percentage to 15.4%, including 1 executive director and 1 independent director. There is 1 female supervisor (who is also an external supervisor), and the ratio has increased to 20%. The Company's existing directors and supervisors have a wealth of experience in mining, finance, accounting, law, risk control and other fields, which constitute a well-balanced professional structure. They have the knowledge, skills and qualities required to discharge their duties.



ESG Risk Management

We recognise that as society develops, stakeholders around the world are becoming more and more aware of their participation in corporate governance, demanding that enterprises to take on more responsibilities for the impacts they make on the communities and environment in which they operate, well beyond their legal regulatory obligations. This trend will continue to intensify, bringing the mining industry not only higher ESG risks, with which stakeholders are concerned, but also opportunities.

We have also found that the key ESG risks faced by our assets around the world vary, depending on the local cultural, climatic, political, economic, and environments. We pay attention to ESG risks from the pre-investment due diligence stage and take them into consideration when making investment decisions.

We bring together finance and taxation, legal, safety and environmental protection experts to conduct comprehensive study of our mines and utilise risk rating and assessment tools to perform detailed and comprehensive evaluations with respect to mining, mineral processing, mine construction, economic, safety and environmental protection, legal, finance and taxation, community, etc. We invest responsibly and acquire projects of which ESG risks are controllable. During the reporting period, the overall ESG risks of our newly-acquired assets in China, Mongolia and Suriname were controllable.

Also, we believe that these assets can be effectively improved by our subsequent investment and management. We will monitor ESG risks, develop management plans and allocate an appropriate amount of funds to support ESG efforts in the subsequent design, construction and operation phases through to mine closure.

During the reporting period, we enhanced and optimised our comprehensive risk management policies and mechanisms in accordance with the COSO Enterprise Risk Management (ERM) framework , defined our risk management objectives, integrated emerging stakeholders' ESG concerns into the system, and further set out our key approaches, guidelines, processes and responsibilities for ESG risk management.

Following are the core ESG risks we are currently focusing on. The corresponding mitigation measures, key approaches and performances are also elaborated in this report.

HSE risk

- Health and safety
- Environmental protection
- Climate change

Ethical risk

- Corruption
- Human rights

Cross-border operational risk

- Geopolitics
- Cultural conflict
- Community relations

ESG Risk Governance and Risk Culture

The Company has established a holistic risk governance structure with the Board as the highest governance body for risk management. The Risk Management Committee is responsible for reviewing the Company's overall risk management objectives and risk management strategies and plans. The role of the Company's Supervision and Audit Office is to organise risk management work, carry out corresponding assessment and evaluation and prepare relevant reports . The Company takes active measures to cultivate a risk culture, establish correct risk philosophy and strives to integrate risk awareness into its core values, employee performance appraisal and daily behaviours.

Risk Strategy and Objective

With Comprehensive, Focused, Dynamic and Ongoing risk management, the Company continuously ensures high-quality and sustainable development of the Company through proactive risk management activities.

ESG Risk Performance

The Company has established a systematic risk management mechanism that encompasses internal and external environmental information collection - risk identification - risk assessment - risk ranking and response – response action report and continuous improvement based on its Risk Management Policy and Risk Management Operational Guidelines.

ESG Risk Review and Revision

The Company regularly summarises and analyses the effectiveness and reasonableness of its existing risk management strategies, with emphasis on evaluating whether the strategies implemented based on risk appetite, risk tolerance and risk control warning lines are effective; and continuously revise and improve the strategies based on the findings and the actual situation as needed.

ESG Risk Information, Communication and Reporting

The Company proactively collects and regularly pays attention to the information on the internal and external environment relevant to its business and management and regularly monitors changes to such information to build and regularly update its risk data base.

Business Ethics

Zijin Mining is committed to upholding professionalism, honesty, and integrity in all business dealings and relationships and conducting business in accordance with all applicable laws and regulations and the highest levels of business ethics. A high-standard business ethics management system is an important pillar of ours to ensure we operate with integrity. We always aim to create a fair, transparent and honest working and operating environment and prohibit all activities that could tarnish the integrity and reputation of the Company. We value and continuously foster a culture of integrity, take a firm stance against any form of corruption, and are committed to creating a healthy business environment that is clean and friendly.

Our Policy

Our "Corporate Code of Conduct", "Policy Statement on Business Ethics Management" and "Policy Statement on Whistleblowing Management" set out the Company's position related to business ethics, such as promoting free and fair competition, anti-corruption, avoiding conflicts of interest, paying taxes under the law, and whistleblower protection. We require every subsidiary, director and employee, as well as supplier and contractor we work with, to adhere to our business ethics policies.

Our rules and regulations such as "Rules on Internal Supervision", "Administrative Disciplinary Measures", "Implementation Measures for Inspection Work" and "Regulations on Internal Audit Management" clearly specify our position on zero tolerance for bribery, extortion and corruption. We take a tough stance on investigating and dealing with corruption and malpractice. The Company will severely penalise or even dismiss employees who violate these policies and regulations.

Our "Rules on Integrity at Work" clearly describes the Company's position on conflicts of interest in business, sets the definition of a person with special relationship, regulates the hiring, employment and remuneration determination of and business interaction with persons with specific relationship, requires employees to declare persons with specific relationship on a regular basis, and specifies our policy regarding managing gift giving and receiving to effectively reduce the risk of corruption of personnel and create a honest working environment.

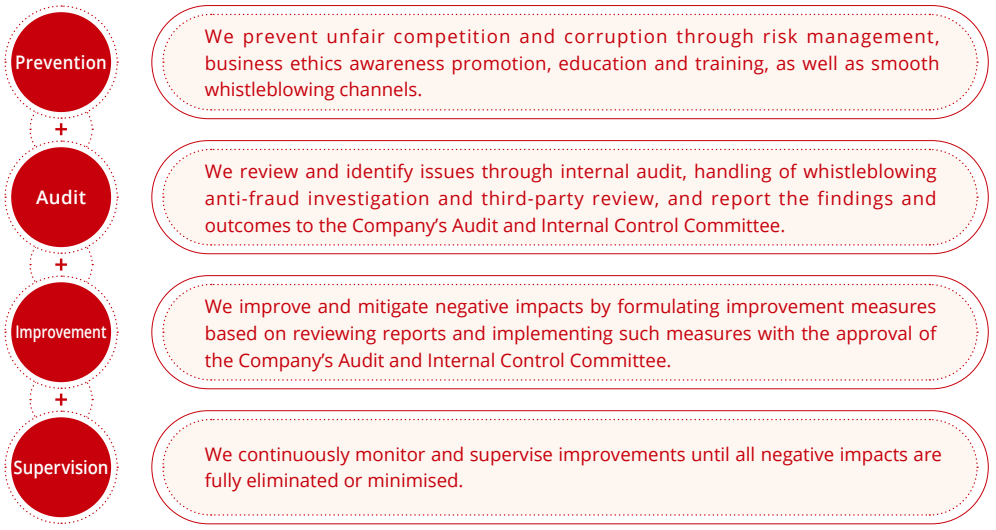
Our "Written and In-person Whistleblowing Management Measures" sets out the Company's position of encouraging and supporting stakeholders to candidly report any violations of business ethics. We have provided stakeholders a grievance and whistleblowing mechanism protected by law, in order to ensure that we address their concerns timely and effectively. In November 2022, which was during the reporting period, the Company revised the "Written and In-person Whistleblowing Management Measures" to "Measures for the Management of Whistleblowing" to make the process of receiving reports and the results more open and transparent, so that whistleblowers are more willing to report.

Risk Management

When operating internationally, laws of different places of jurisdiction may impose different compliance requirements on our business. Suspected ethical, compliance or legal breaches may also put our business at significant risk or result in fines and damage to reputation. Following the "United Nations Convention against Corruption" and the Company's "Risk Management Rules", during the reporting period, we issued the Operational Guidelines for Risk Management to include anti-corruption as one of the core elements in identifying risks. We minimise corruption, bribery, unfair competition and other risks related to business ethics through improving the relevant management system, tightening process controls, carrying out training and education and providing more protection for complainants and whistleblowers. We conduct regular anti-corruption assessments and propose improvement measures to continuously cultivate our risk management culture.

◎ Business Ethics Management System

Zijin Mining has established a "5-in-1" business ethics management system comprising of the Supervisory Committee, a Disciplinary Inspection Committee supervision body, audit body and internal control body. The Supervision and Audit Office is established at the Company's headquarters as a dedicated department for the business ethics management system. It is directly under the Supervisory Committee to maintain the independence of the internal supervision system. We have also set up internal supervisory and audit departments at all production and operation sites, with dedicated personnel responsible for compliance management and supervision. They are vertically managed by the Supervision and Audit Office at the headquarters to implement total supervision.



Zijin Mining Business Ethics Management System

Performance and Approaches

◎ Anti-corruption

Zijin Mining formulates anti-corruption review plans at least once a year for new subsidiaries and key subsidiaries and at least once every two years for other subsidiaries and regularly revises them based on risk levels and industry trends. We carry out inspections, audits, internal controls and special inspections on our subsidiaries every year according to various elements in our business ethics and anti-corruption policies, and continuously improve the issues identified in the review results.

During the reporting period, the Company's headquarters conducted 37 special inspections on anti-corruption. This plan has a planned completion rate of 100%. In addition, the supervisory bodies we sent to our subsidiaries conducted anti-corruption risk assessments at their operating locations. During the reporting period, internal control assessments were carried out at the company's headquarters and 60 subsidiaries (including guiding and supervising 49 subsidiaries in their internal control self-inspection). A total of 2,237 cases of deficiencies for rectification were identified, with a rectification closure rate of 94.6%. This has driven subsidiaries to continuously improve and strengthen their internal control self-inspection and evaluation mechanisms.

Any political contribution or other political expenditure made for the purpose of obtaining business opportunities or commercial benefits may constitute a bribe. Zijin Mining does not sponsor local and national political parties, candidates, affiliates, affiliated organisations, etc. for the purpose of obtaining commercial benefits or other benefits.

During the reporting period, there were 9 cases of employees being dismissed or disciplined for corruption, 3 cases of contracts with business partners being terminated due to corruption and 2 cases of embezzlement lawsuits (both have been transferred to judicial authorities and have not yet been concluded).

◎ Anti-corruption policy awareness

Zijin Mining requires all subsidiaries directors, employees, suppliers and contractors to follow our policies and standards and ensures the implementation of these policies and standards through various anti-corruption awareness-raising efforts.

We assess job positions with high corruption risk on a regular basis and provide focused trainings for directors, supervisors, senior management, new hires, newly promoted employees and those in key sensitive positions with high risk. During the reporting period, we organised an array of activities for our employees, including the signing of the oath of integrity on International Anti-Corruption Day, anti-corruption questionnaire surveys, putting forward rational suggestions, integrity talks and integrity "better half" to strengthen the anti-corruption and integrity education.

To build an open and transparent supply chain, integrity clauses are included in the contracts signed between the Group and its subsidiaries and suppliers and contractors. We regularly organise collaborative anti-bribery exchange seminars with suppliers and contractors to jointly learn our anti-corruption policy and regulatory documents such as the "Policy Statement on Whistleblowing Management" and "Policy Statement on Business Ethics Management".

Zijin Mining Anti-corruption Management Process

Zero tolerance	Maintain zero tolerance for corruption, conduct all businesses in strict compliance with domestic and international anti-corruption laws
Due diligence	Screen all business counterparties, third parties and job applicants carefully prior to entering into relationships
Risk identification and response	Regularly identify and update corruption risks associated with the business processes, and effectively respond to identified risks
Communication and training	Provide information, recommendations and training for senior management, employees, suppliers and contractors to be fully aware of the Company's anti-corruption requirements
Supervision and improvement	Perform regular external and internal audits on the effectiveness of the anti-corruption procedures and improve the procedures accordingly
Accountability and penalties	Thoroughly investigate all suspected acts of corruption and hold the persons who commit corruption accountable
Reporting	Regularly inform stakeholders on the Company's anti-corruption policy and provide feedback channels

Business Ethics and Anti-corruption Policies and Procedures Acknowledgment Coverage				
Indicator	2022	2021	2020	2019
Directors, Supervisors and senior management	100%	100%	100%	100%
Employees	100%	100%	100%	100%
Suppliers, contractors	100%	100%	100%	100%

Zijin Mining's Business Ethics Training Coverage Rate				
Indicator	2022	2021	2020	2019
Directors, Supervisors and senior management	100%	100%	87.19%	83.29%
Employees	75.50%	64.82%	63.96%	68.00%
Suppliers, contractors	70.90%	62.10%	61.55%	58.24%

◎ Anti-monopoly and Anti-unfair Competition

Zijin Mining advocates free and fair competition while opposing all forms of monopoly and profiteering:

- We strictly abide by "the Law of the People's Republic of China Against Unfair Competition", "the Civil Code of the People's Republic of China" and other relevant anti-monopoly and anti-unfair competition laws and regulations and international standards.
- We have a mechanism for honest and fair competition. To prevent unfair competition, we conduct special investigations into the unfair competition clues that are identified or reported.
- We also regularly review the projects of our subsidiaries. We have different review frequencies based on the level of the projects. In the past three years, we did not have any litigation cases against the Company in relation to unfair competition.

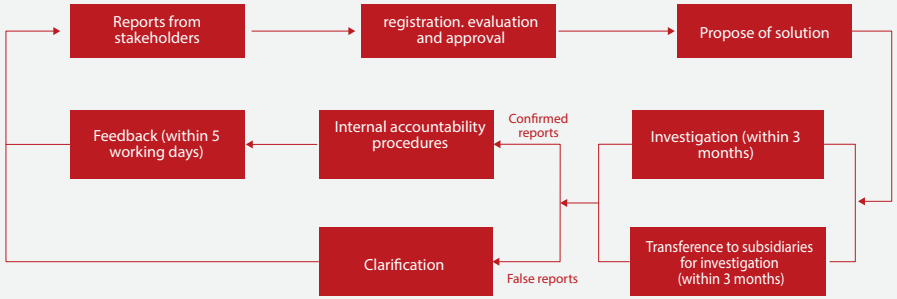
◎ Grievance and Whistleblowing Mechanism

Zijin Mining encourages all stakeholders to candidly report any potential violations against business ethics management. To ensure all stakeholders have easy access to grievance channels and their concerns are promptly addressed, the Company provides a complete grievance and whistleblowing mechanism for stakeholders, continuously develops grievance and whistleblowing channels and regularly checks and evaluates the effectiveness of the mechanism.

During the reporting period, we looked into and assessed the grievance and whistleblowing management efforts of 41 subsidiaries in accordance with our newly revised "Measures for the Management of Whistleblowing". We reviewed and organised the grievance and whistleblowing management system, management procedures, and whistleblowing channels of each subsidiary to ensure that they are capable of effectively handling all types of whistleblowing information, including the ones in the local language. We also analysed the grievance and whistleblowing information received in 2022 and made suggestions for improvement to ensure the effective operation of the grievance and whistleblowing mechanism of each subsidiary.

Grievance and Whistleblowing System

The whistleblowing system is maintained and managed by the Company's Supervision and Audit Office. Dedicated personnel members are responsible for receiving grievance information, following which they handle and verify the information of all parties strictly according to policy and legal requirements and report the verification and investigation findings to the management. After approval by the appropriate management bodies, violations are addressed by means of conversations or disciplinary actions, or even transferring the case to judicial authorities for handling..



Zijin Mining's Grievance and Whistleblowing Process

◎ Whistleblower Protection

Zijin Mining does not tolerate any forms of harmful conduct or retaliation against whistleblowers. We encourage all stakeholders to report anything suspicious or improper . Information provided by whistleblowers helps us to identify and address issues and improve the way we do business. To gain the trust of whistleblowers and encourage them to report, we take the following measures:

We encourage whistleblowers to make report. We receive and accept grievance and whistleblowing reports through dedicated personnel at dedicated locations and on dedicated telephone lines and mailboxes or through third parties.

We record every report individually and take strict measures to keep the information confidential, such as encrypting and storing the information, implementing strict control on the number of people with access to the information and concealing the personal information of the whistleblower.

We have a stakeholder recusal mechanism where persons with a conflict of interest with the whistleblower or who has a stake in the information reported must take the initiative to recuse themselves. Upon request of the whistleblower and when deemed necessary by the head of supervision, persons who may have a potential conflict of interest are also required to recuse themselves after it is confirmed by the Supervision and Audit Office.

We do not allow any form of punishment, disciplinary action or retaliatory action against whistleblowers. We take strict action against anyone who threatens or takes retaliatory action. Depending on the actual situation, we may take disciplinary action, dismiss the person or even transfer the case to judicial authorities to pursue civil and criminal responsibilities.

Whistleblowers may report to the Company (headquarters) using their real names or anonymously in the following ways:

Telephone
+86-0597-3833182

Online platform: Zijin Mining integrity reporting platform
https://rac.zjky.cn/honest/static/index.html

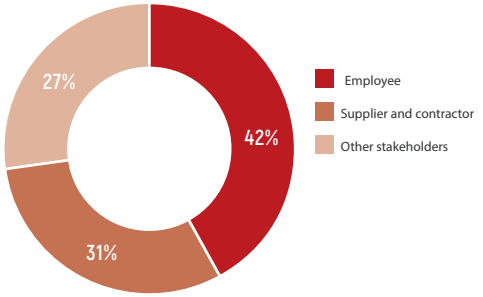
Email
jcsjs@zjky.cn

WeChat
Zijin Mining Supervision Platform

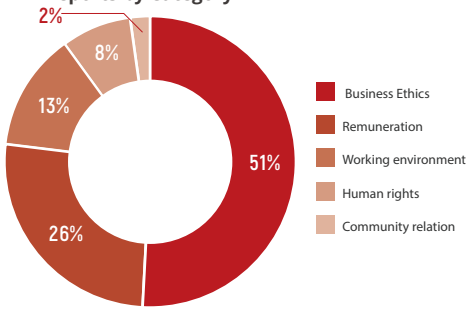
In person or by mail
Supervision and Audit Office, Zijin Mining, 1 Zijin Road, Shanghang County, Fujian Province 364200

During the reporting period, a total of 204 complaints of violations of the "Policy Statement on Business Ethics Management" were received through our grievance and whistleblowing mechanism, out of which 195 were closed after action was taken, representing a closing rate of 95.59%. The sources and categories of grievance and whistleblowing reports we received are shown below:

Grievance and Whistleblowing Reports by Source



Grievance and Whistleblowing Reports by Category



Future Plans

1. Innovate business ethics management and fully utilise information technology for data analysis to make supervision more efficient and achieve better results.
2. Provide more anti-corruption training and education for employees and their families, as well as suppliers and contractors.

Human Rights

Zijin Mining has set Value Creation and Development for All as its values. Collaborative partners, affiliated communities, employees and governments who share the same course with us, regardless of their race, gender, language or religion, are all part of our business community and share the fruit of our development. We respect the human rights of all employees, affected communities and business partners. We do not tolerate any form of discrimination, harassment or retaliation in the workplace. We treat all employees equally, regardless of their nationalities, races, genders, religious beliefs and cultural backgrounds. Through our operations, we strive to make our partners, contractors and suppliers join us in complying with human rights standards that are internationally recognised.

Our Policy

Articles 14 to 17 of Zijin Mining's "Corporate Code of Conduct" set out our core objectives of respecting human rights, which is used as a fundamental principle of conduct and work in our business dealings with stakeholders, as well as a core value we consider when selecting business partners.

We follow internationally recognised norms and tenets related to respect for human rights in standards such as the UNGPs, RGMPs, the "UN Universal Declaration of Human Rights" and the ILO "Declaration on Fundamental Principles and Rights at Work". Combining this with UN initiatives, we strive to extend the higher standards thereof to all our operating sites. However, in international operations, human rights standards may vary with the regulations and cultures of different operating locations, in which case local regulatory requirements will take precedence. During the reporting period, all of our subsidiaries converted or learned international human rights-related requirements and incorporated them into the contracts they sign with suppliers.

Risk Management

In following the UNGPs and the Company's human rights standards, we require all subsidiaries to progressively establish processes to identify and manage human rights risks and to integrate human rights assessments into their impact or risk assessments. During the reporting period, we identified several human rights risks in the Company's operations, with artisanal and small-scale mining (ASM) being the main human rights challenge we are currently facing. We pay close attention to human rights risks in the use of child labour, forced labour workplace harassment, and discrimination, which are of high social concern, especially in high-risk areas where our business operates. During the reporting period, we did not find any significant human rights risks related to child labour, forced labour, or violations of the freedom of association and collective bargaining rights at Zijin's operations or major collaborative suppliers. Despite facing low risks in these aspects, we are still actively benchmarking ourselves against exemplary global human rights protection practices and continuously improving the relevant management mechanisms and remedial measures.

Performance and Approaches

The Company's Board is responsible for human rights risk management issues, while the ESG Management Committee's role is to implement human rights risk management efforts. Currently, all subsidiaries have working bodies that are vertically led by the ESG Management Committee, to monitor compliance with human rights standards and to implement their respective human rights risk management efforts. We strengthen our benchmarking and research on international human rights policies, laws and regulations, reflect these experiences and standards in our internal governance standards and processes and incorporate them into our routine inspections and audits, in order to identify and amend policy provisions that may give rise to human rights disputes. During the reporting period, we did not find any human rights violations.

◎ Labour and Human Rights

For the potential impacts on human rights in our business and operations, we have established human rights protection mechanisms to avoid negative human rights impacts. During the reporting period, we collected and analysed feedback on our grievance mechanism from stakeholders, external experts and other organisations, and made corresponding improvements.

In the event the Company inadvertently triggers an incident that violates and impairs human rights, we will implement relevant remedial plans to minimise the harm and impacts as much as possible.

Eradication of child labour: We require all current projects to strictly comply with the minimum working age requirements of the laws and regulations of the country (place) in which they are located or of ILO Convention No. 138, whichever is higher. We have a comprehensive hiring screening mechanism to avoid hiring child labour by mistake. In addition, we require contractors, suppliers and third party recruitment agencies to eradicate the use of child labour, analyse the risk of hiring child labour by mistake and take timely measures.

Eradication of forced labour: We follow a labour risk assessment process that prevents modern slavery and continuously improve human rights risk management in our operations and supply chain to reduce the risk of forced labour.

Freedom of association and collective bargaining: We support the union to negotiate and sign the "Employee Wage Collective Agreement" and "Employee Collective Labour Contract" with the Company on behalf of employees to protect their legitimate rights and interests. Employees may join and withdraw from the union at their own free will. When there are matters that may have a negative impact on the employees, such as major operational changes, the Company will give the employees advance notice to minimise such impact. During the reporting period, our collective bargaining agreement coverage rate reached 82.62%.

Anti-discrimination and anti-harassment: In following the "Workplace Sexual Harassment Prevention and Penalisation Policy", we prevent and reduce the risk of sexual harassment in the workplace through education and training, dissemination of legal knowledge, establishment of a joint-action mechanism for prevention and punishment of sexual harassment in the workplace and instilling the zero tolerance for sexual harassment in the workplace awareness.

Human rights of indigenous peoples: In following the United Nations Declaration on the Rights of Indigenous Peoples, we adhere to the principle of Free, Prior and Informed Consent (FPIC) in our community work and respect the rights, interests, wishes, cultures and natural resource-based lifestyles of indigenous peoples. During the reporting period, we did not find any violation on the human rights of indigenous peoples (see "Community" for specific approaches and performance on respecting the rights of indigenous peoples).

◎ Artisanal and Small-scale Mining (ASM)

According to World Bank statistics, artisanal and small-scale mining (ASM) provides livelihoods for as many as 100 million people worldwide, which is an important source of economic income for local residents. However, we also recognise that informal ASM activities can pose serious safety and human rights risks to miners, communities, companies, and our employees, which require the joint efforts of companies and society to address these challenges. We remain vigilant against illegal and human rights-violating activities such as intrusion, theft, and assault while supporting the fomalisation of ASM activities to protect local livelihoods. We will ensure that our supply chain does not involve products related to informal ASM activities, and adopt a proactive attitude in collaborating with government agencies, industry associations, and local communities to jointly promote the fomalisation of artisanal mining, mitigating the potential safety, environmental, and human rights risks that ASM may bring.

Improve the economic environment of communities

By improving the economic and education environment of communities and implementing alternative livelihood projects, we make efforts to eliminate the socioeconomic contextual factors that contribute to illegal artisanal mining.

Support formalisation

We support and participate in the local government's efforts to formalise artisanal and small-scale mining, providing training, technical, and business operation support to help improve the operating conditions for legally operating groups.

Case

Continental Gold works with government to promote ASM formalisation

Since 2014, Continental Gold, a subsidiary of Zijin Mining, has been working with Colombian national government agencies on a mining formalisation project. It helps the government improve local mining conditions and effectively reduces the negative social impacts of illegal mining on communities by establishing a formalised mining mechanism to identify the main risks and problems, implement plans and sign various forms of mining formalisation agreements with ASMs.

As of the end of the reporting period, Continental Gold had included 11 local formalised artisanal mining companies into its supply chain. The mining formalisation project has created a total of 260 local jobs, more than half of which are for women. A total of 900 individuals have benefited from the project.

Workers from a formalised artisanal mining company sorting ore

◎ Security and Human Rights Management

Zijin Mining follows the "Policy Statement on Security and Protection of Human Right" issued by the Company and is committed to carrying out security work in a manner that respects human rights, protecting the life, property, safety, freedom, and human rights of employees, communities, and other stakeholders who may be affected by our operations, and striving to gain the trust of host communities. During the reporting period, we followed the "Voluntary Principles on Security and Human Rights" as a consistent guideline for the work of our own security personnel and security service providers. After evaluating and planning, we also took the following core actions:

- Integrate security and human rights management into the Company's ESG strategic planning and operations; hire professional security managers for mines with high security risks;
- Protect human rights with modern equipment; use high-tech security equipment such as thermal imaging cameras, infrared cameras, access management systems, security check systems and drones for mines with high security risks;
- Establish communication and cooperation mechanisms with the local social security administration departments at each project site, jointly promoting security and human rights where the projects are located;
- Implement security audit plans to include security service vendors in security audits to identify problems and risks and continuously make improvement;
- Conduct regular training for security personnel and mine police on the "Voluntary Principles on Security and Human Rights", the "Principles on the Use of Force" and human rights protection awareness and human rights knowledge;
- Work with government departments to set up judicial offices at project sites to guarantee effective management of human rights-related risks.

Human Rights Training for Security Personnel

Category of security personnel	Number of security personnel	Number of security personnel who has received human rights training	Percentage of security personnel who has received human rights training
Security personnel directly hired by the Company	592	546	92.2%
Third-party security personnel	1,162	1,156	99.5%
TOTAL	1,754	1,702	97.0%

Future Plans

1. Continuously follow up on and study the human rights-related laws and regulations of the United Nations and the countries where the projects are located, to fully identify human rights risks and improve our social responsibility management policies, standards and processes.
2. Gradually rollout human rights due diligence at all operating sites around the ESG review plan, especially for mines that are located in high-risk areas. Strengthen specialised training and capacity building for project management and contractors. At the same time, cooperate with influential professional institutions and NGOs both domestically and abroad to build responsible business and human rights management pilot projects overseas.
3. Promote the establishment of workplace sexual harassment prevention and punishment mechanisms in all subsidiaries, improve handling procedures for workplace sexual harassment, addressing sexual harassment reports, and take remedial measures.
4. Strengthen security and human rights in the supply chain and ensure suppliers comply with and implement the "Voluntary Principles on Security and Human Rights".
5. Improve the complaint and grievance mechanism, enabling our internal processes to identify issues related to human rights more effectively.

Our Climate Transition

Climate change has become a major non-traditional security challenge facing the sustainable development of mankind. How to effectively deal with climate change has become an urgent global task. On the one hand, the mining industry is one of the sources of GHG emissions, and on the other hand, mineral products are among the most important raw materials for global climate transition. With the mission of Providing Materials that Improve Standards of Living in a Low Carbon Future Zijin Mining will strive to reduce the carbon footprint of its products and consciously fulfil the responsibility of a corporate citizen of the earth, to contribute to the global low-carbon transition.

2022 Key Performance

GHG emissions intensity by industrial added value dropped to

1.55 tCO_2e/**RMB10,000**
down **16.2%** from the baseline year of 2020

Energy consumption intensity by industrial added value

3.25 MWh/**RMB10,000**
a year-on-year decrease of **13.33%**

Clean energy generated was

257.46GWh

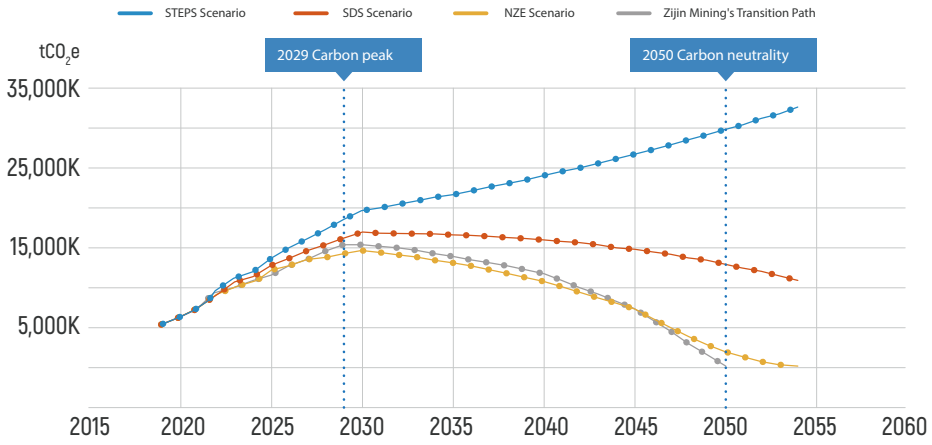
Renewable energy consumed accounted for

16.21%

Note: The statistic scope of this chapter covers all production companies whose operations are under the actual operational control of the Company, including mines, smelters and processors.

Climate Goals and Commitments

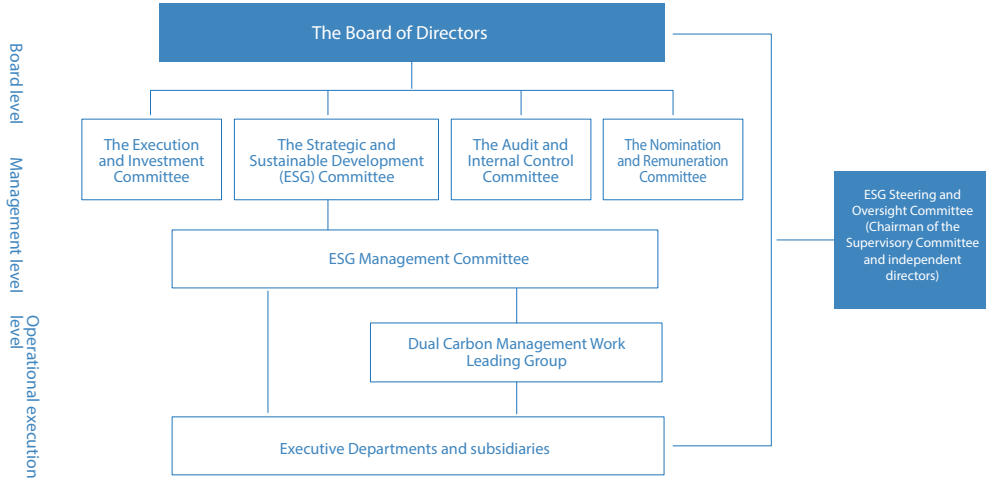
As an important participant in the global mining market, Zijin Mining follows the goals and principles of the "United Nations Framework Convention on Climate Change" and "Paris Agreement". Based on the analysis of different scenarios, we will strive to achieve carbon peak in 2029 and carbon neutrality in 2050. We compiled and released the "Climate Change Action Plan" as our action plan based on the TCFD framework. It defines our low-carbon transition path, by which we continue to reduce the carbon footprint of our products to reach our short-, medium-, and long-term goals.



2022-2050 Zijin Mining's GHG Emission Forecast

Climate Governance

Strong governance mechanisms are our basis for managing climate-related issues. Relying on the ESG governance system led by the Board, we set medium- and long-term development goals for climate change-related issues. During the reporting period, we established a Dual Carbon Management Work Leading Group in the ESG Management Committee to guide and drive the formulation of climate strategies and the implementation of climate-related goals in our subsidiaries.



Zijin Mining's Climate-related Issue Governance Framework

Our Objectives

Short-term

By 2029, reach **Carbon Peak**

2029

We will actively implement emission reduction measures to achieve carbon peak. We will gradually develop estimation, monitoring and management system of scope 3 GHG emissions.

Medium-term

2030~2045

We will strengthen carbon reduction technologies such as hydrogen, electrification, new energy and heat pumps to achieve a year-on-year reduction in GHG emissions after reaching the peak.

Long-term

By 2050, reach **Carbon Neutrality**

2046~2050

We will enhance the proportion of various emission reduction measures and its efficiency. By taking carbon sinks, carbon capture and storage, carbon trading and other long-term technical measures and financial instruments, we will achieve carbon neutrality.

- Commitment to **a gradual reduction of the GHG emissions intensity** (with a base year of 2020)
  - By 2025, reduce GHG emissions per unit of industrial value added by **20%**
  - By 2029, reduce GHG emissions per unit of industrial value added by **38%**
- Commitment to optimise our energy structure
  - By 2030 achieve 3**0%** of our energy mix from **renewable energy sources**

Climate Strategy

The goals of carbon peak in 2029 and carbon neutrality in 2050 represent our ambitions to deal with climate change, which means our operating model is in the process of major transition. To improve our resilience to climate change and control climate-related risks, we fully identify the type, degree, cause and development trend of climate risks, take risk prevention and mitigation measures, and track and monitor the effectiveness of important risk response measures. We recognise the development opportunities brought about by the global energy transition and the increased demand for key industrial raw materials while actively managing climate-related risks. Therefore, we will continue to pursue technological breakthroughs and transform resource advantages into green and low-carbon products, to secure the stable and reliable supply chain of global low-carbon raw materials. During the reporting period, we cooperated with professional institutions to analyse the climate change risks and opportunities faced by the Company now, in the 2030s and 2050s, using the scenario models of the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA).

◎ Physical Risks

We selected the IPCC low-emission scenarios (SSP1-2.6) and high-emission scenarios (SSP5-8.5) and used them to carry out climate disaster risk identification tests on 42 major assets in our operation. These tests covered scenarios such as extreme high temperatures, extreme low temperatures, river floods, landslides and drought, and we made corresponding response plans. The results show that water stress, drought and landslides are the main physical risks we face at present.

Physical Risk Assessment[1]

Climate disaster	Baseline	2030s		2050s	
		SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5
Extreme high temperature	0% (0)	5% (2)	12% (5)	14% (6)	45% (19)
Extreme low temperature	7% (3)	0% (0)	2% (1)	0% (0)	0% (0)
River flooding	5% (2)	5% (2)	5% (2)	5% (2)	5% (2)
Flooding from extreme precipitation	5% (2)	5% (2)	5% (2)	5% (2)	5% (2)
Typhoon	5% (2)	10% (4)	12% (5)	12% (5)	12% (5)
Landslide	17% (7)	24% (10)	17% (7)	26% (11)	19% (8)
Water stress and drought	14% (6)	21% (9)	21% (9)	24% (10)	24% (10)
Wildfire	10% (4)	10% (4)	12% (5)	14% (6)	17% (7)

Very high | high | Medium | Low | Very low

1.The percentages and numbers (in brackets) of the Company's assets subject to the impact of the eight types of climate disasters in different periods and climate emission scenarios, with the color indicating the severity. Very high: long-term (even permanent), serious and significant financial impact on the business, or comprehensive impact on overall assets; High: long-term (months), significant financial impact on the business or extensive impact on overall assets; Medium: medium-term (weeks), moderate financial impact on the business, or moderate impact on overall assets; Low: short-term (weeks) impact on the business without financial impact, or minor impact on overall assets; Very low: Exposure to climate hazards is minimal, with limited potential impact on assets.

◎ Transition Risks

We selected the IEA low-emission Sustainable Development Scenario (SDS) and high-emission Stated Policies Scenario (STEPS) and used them to assess the potential transitional risks and opportunities brought by climate change. The results show that the climate-related transition risks and opportunities we face come from multiple sources and will have continuous impacts in the future.

Transition Risk Assessment

Category	Risk/opportunity	2030s	2040s	2050s
Risk	GHG emission reduction policy pressure	-0.15	-0.42	-0.63
Risk	Carbon pricing	-0.46	-0.75	-0.67
Risk	Increased customer demand for low-carbon products and services	-0.10	-0.29	-0.42
Risk	Insufficient supply of fossil fuels	-0.10	-0.19	-0.42
Risk	Uncertainty in electricity prices	-0.06	0.00	0.00
Risk	R&D and investment in low-carbon transition technologies	-0.10	-0.19	-0.14
Opportunity	Increased customer demand for low-carbon products and services	0.14	0.19	0.26
Opportunity	Use of renewable energy	0.08	0.18	0.21

High risk | Medium risk | Low risk | Neutral | High opportunity | Medium opportunity | Low opportunity

Based on the risk and opportunity analysis, the Board of Directors and the Strategies and Sustainable Development (ESG) Committee formulated three core climate strategies in accordance with our mission and vision, and where we position ourselves in the global transition to a low-carbon economy:

Embracing Planetary Change

providing low-carbon mineral materials for a better livelihood and helping the world to achieve the goals of "Paris Agreement"

Revitalising Industrial Processes

building a clean, low-carbon supply chain, allowing more people to benefit from Zijin

Maintaining Continual Improvement

a green, high-quality and sustainable pathway, reducing the carbon footprint across all the sectors

In the process of global transition to a low-carbon economy, the scarcity of upstream materials limits the pace of low-carbon transition. To help the global energy transition, we will accelerate the transition of our resource advantages into economic and social contributions, vigorously increasing the output of our advantageous minerals including copper and gold and new energy minerals including lithium. Also, we will continuously pursue technological breakthroughs in the efficient exploitation of minerals, so as to achieve mineral exploitation with higher efficiency, lower cost on the fewer emissions. Furthermore, relying on our advantages in the field of mineral and metal raw materials, we will moderately extend our industrial chain downstream and cover new energy-related materials, to ensure the stability of the global new materials supply chain.

During the reporting period, we made the strategic investment in Longking, resulting in significant improvement in the Company's new energy storage technology, assets, and production capacity. Besides, we successively completed the acquisitions of Tres Quebradas Salar in Argentina, the Lakkor Tso Salar in Tibet, and the Xiangyuan Lithium Polymetallic Mine in Dao County, Hunan Province. It is expected that we will have a production capacity of 120,000 tonnes of lithium carbonate by 2025. Meanwhile, our new materials projects, including those of lithium iron phosphate, electrolytic copper foil and high-performance copper alloy, are advancing as planned. In the future, we will use our source advantages to make breakthroughs in the field of materials and will further extend our industrial chain to new energy industries such as battery energy storage and green hydrogen.

Risk Management

Based on the operational characteristics and future transition expectations, we formulated short-, medium-, and long-term mitigation measures for various risks. We intend to continuously improve our resilience to climate change through risk tracking and optimisation of mitigation measures. The very high or high physical risks we are currently facing are within reasonable expectations. We have formulated well-established management and safeguard measures for various risks, keeping them under our control, while we are taking advantage of potential opportunities to ensure that our operation strategy adapts to global climate transition.

Responses to Physical Risks

Climate disaster	Period of impact	Mitigation measure	Risk level
Extreme high temperature	Medium and long term	Build a 24/7 weather monitoring system for our mines to be alert in the case of extreme high temperature and thermal stress so that the Company will be able to deal with the risk of extreme high temperature in advance; implement safety and health measures for work at high temperatures to prevent personnel from being harmed; Increase water recycling to protect water supply and water consumption equipment from the impact of extreme high temperatures.	Extremely high
Extreme low temperature	Short term	Optimise the design of mines and their power grids to improve their resilience to low temperature and severe weather conditions such as persistent freezing and snowstorms.	Low
Flooding	Short, medium and long term	Drainage facilities can withstand rare extreme rainstorms (once in 500 or 100 years superstorms); Make a flooding disaster responding plan for extreme precipitation and prepare adequate flood protection items.	Low
Typhoon	Short, medium and long term	Mine infrastructure and buildings can withstand super typhoon-level hurricanes; Make a typhoon disaster responding plan, prepare enough emergency supplies, and pay attention to the typhoon warning information meteorological bureau.	Medium
Landslide	Short, medium and long term	Stabilise slopes to reduce the risk of landslides; Enhance the slope monitoring system; Establish a landslide forecast system to reduce its impact.	High
Water stress and drought	Short, medium and long term	Implement water resource monitoring programmes, impervious treatment of cisterns, rainwater management, and other physical measures or procedures to protect surface and/or groundwater resources; Strengthen the protection of surface water and groundwater resources and regularly monitor changes in water quality so as to take timely measures; Manage water-related risks in a timely manner based on the "Water Balance Model" for each mine site; Avoid water resource protection areas as much as possible when conducting project construction or before acquisition. For all subsidiaries, there will be water analysis and assessment before water is withdrawn and used. Subsidiaries directly withdrawing water from rivers, lakes or underground shall submit a "Water Resource Justification Report".	High
Wildfire	Short, medium and long term	Enhanced the assessment on weather monitoring and warning systems of assets and their nearby wooded areas; Increase the use of water-cooling methods in hot weather to avoid wildfires; Install fire-fighting equipment and strengthen cooperation with local fire administration.	High

Responses to Transition Risks and Opportunities

Transition risk/opportunity and metrics	Period of impact	Response	Level
GHG emissions reduction policy pressure	Medium and long term	To reduce the management complexity caused by differences in different jurisdictions, Zijin Mining conducts work in accordance with international best practice and standards.	High
Carbon pricing (e.g., emissions trading, carbon tariff system)	Short, medium and long term	While implementing the GHG emissions reduction strategy, Zijin Mining pays close attention to the carbon pricing mechanism, especially the progress of the GHG emissions trading mechanism, in the country where our assets are located and globally, and copes with challenges to move towards the goal of best international practice.	High
Increased customer demand for low-carbon products and services	Medium and long term	Zijin Mining's network of resources in the field of new energy and new materials is focused on metal mineral resources, including copper, lithium, cobalt, nickel and platinum, which are related to the low-carbon economy. It is accelerating to become an important supplier of new energy metal products in the world, while extending our industrial chain to the new material industry, using renewable energy alternatives and other methods to reduce the carbon footprint of our products.	High
Insufficient supply of fossil fuels	Medium and long term	Actively carry out low-carbon transition and technological improvement and diversify the replacement of fossil fuels with various types of renewable energy to ensure energy supply. Sign green power contracts with energy companies to ensure the stability of power supply.	High
Uncertainty in electricity prices	Short term	We continuously track the construction of national and local power trading markets, engage in power trading and renewable energy trading activities, and obtain long-term benefits in market-oriented operations by virtue of green, low-carbon, energy-saving production processes and low energy consumption.	Low
R&D and investment in low-carbon transition technologies	Medium term	Conduct research on various low-carbon technologies through feasibility studies and cost-benefit analysis. Increase carbon neutrality investment and carry out critical research on core industrial energy-saving technologies and carbon-negative technologies.	Medium
Requirements of stakeholders for climate risk disclosure	Medium and long term	Through transparent disclosure, we improve international climate-related evaluations and actively respond to climate-related questions and questionnaires from various stakeholders to enhance the Company's international image and reputation. We actively communicate with the outside through the official website, ESG reports, and various ratings, and promise to comply with the TCFD framework for disclosure purposes.	Low
Increased customer demand for low-carbon products and services	Medium and long term	Based on reasonable expectations of changes in our own business, the development of the new energy industry under a low-carbon scenario will be more beneficial to the Company. In the future, Zijin Mining expects to expand product categories and production capacity. In addition , we will increase investment in the production of key raw materials, such as lithium, for green energy, so as to seize the opportunities brought about in the global energy transition.	High
Use of renewable energy	Medium and long term	In the future, we are expected to gradually achieve the goal of carbon reduction through the combination of increased use of renewable energy and improvement in technology. Currently, Zijin Mining has begun research and plans to implement renewable energy and technology replacement projects covering wind power, photovoltaics, hydropower, heat pumps and geothermal technology.	Medium

Risks Opportunity

Performance and Approaches

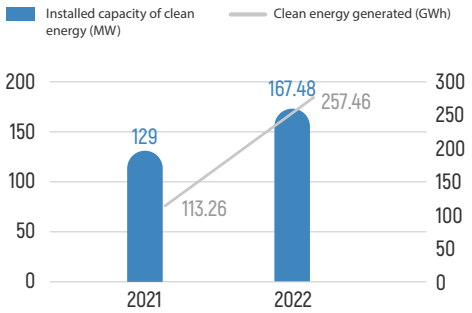
◎ Energy Saving and Decarbonisation Transition

We promoted the emissions reduction plan based on the transition road map of the "Climate Change Action Plan". During the reporting period, we invested RMB593 million in climate change management. 55% of the mines formulated their own emissions reduction plans, which included emissions reduction targets and performance, energy-saving technical transition plans, and new energy transition investment plans. These plans have been reviewed by the Company's Dual Carbon Management Work Leading Group and experts in energy and climate-related fields to ensure that the plans are economical, scientific and practical while focusing on emission reduction.

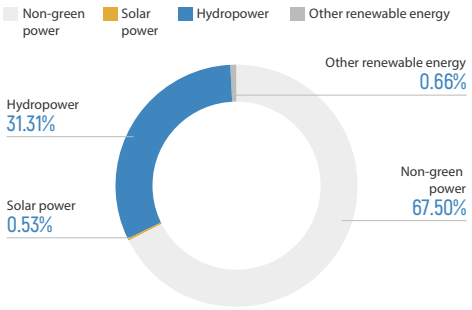
- **Energy-saving and emission-reducing technology substitution:** Our mines optimised the production process, vigorously promoting technological transition such as "More Crushing and Less Grinding". It reduced GHG emissions per unit of ore processed. Our smelters used heat pump technology for extensive recovery and recycling of low-temperature waste heat, which was used for purposes such as power generation and steam drying of furnace materials, thereby reducing the waste of industrial waste heat resources and further reducing GHG emissions.

- **Clean energy alternatives:** The energy transition is the most important way in which we can achieve our emissions reduction goals. During the reporting period, through mergers and acquisitions and the construction of new renewable energy facilities, the Company's installed capacity of clean energy reached 167.48 MW, with 257.46 GWh of power generated. Also, some of our mines and smelters required power suppliers to provide more renewable energy through agreements and negotiations with power agencies or power generation companies. Our subsidiaries purchased and generated green electricity, and during the reporting period, the renewable energy consumed accounted for 32.50% of the total electricity consumption.

Clean Energy Generated



Electricity Consumption by Source



Case

Julong Copper Uses Terrain to Reduce Energy Consumption

Julong Copper is located in the hinterland of the Qinghai-Tibet Plateau, with the maximum height difference between the mining field and the mill exceeding 1,000 m. To save energy and reduce consumption, the mining area was designed to take full advantage of the height difference. Set up in a trapezoidal shape to follow the natural flow, the system allows materials to be transferred economically or flow downward by gravity to reduce the energy consumed for hoisting and transferring. The industrial sites are centrally located to reduce the power of belt transmission and operation costs. To reduce the large amount of GHG emissions produced from transportation, Julong Copper introduced nearly 40 all-electric mining trucks and built a long-distance ore conveyor belt rechargeable on the downhill return movement, whose power generation capacity reaches 6,200 kWh per hour. The 5.8-km long main conveyor belt does not require external power supply , but instead, it also generates an additional 2,500 MWh of electricity every month, which is fed back into the Company's power grid, equivalent to 58.7% of the electricity consumed during the open-pit mining operation in the Julong Copper. This is equivalent to a monthly GHG emissions reduction of about 2,447.5 tCO_2e.

Julong Copper's Long-distance Ore Conveyor Belt Rechargeable on the Downhill Return Movement

The Ground Photovoltaic Project in Duobaoshan Copper Mine

- **Clean fuel substitution:** We continue to promote electricity substitution in transportation vehicles and steam boilers. During the reporting period, subsidiaries including Luoyang Kunyu, Longnan Zijin, Xinjiang Jinbao and Zijin Zinc have introduced all-electric mining trucks, all-electric dump trucks, new energy heavy trucks and other vehicles to replace the existing diesel-powered transportation vehicles. We have also replaced traditional coal-fired boilers with electrical ones to reduce GHG emissions. In addition, we signed a contract with Fuzhou University to introduce the first integrated demonstration project of the ammonia-to-hydrogen conversion refuelling station in Fujian, delivered the first hydrogen-fuelled power station in China, and built China's first hydrogen-fuelled fuel cell bus. It turns the low-cost fuel cell hydrogen energy production and application into reality and accelerates the development of our zero-carbon sectors. In the future, this technology will be gradually implemented and applied in specific areas, including factory sites, port areas and industrial parks, in an effort to realise clean iterative conversion of transportation vehicles.

- **Carbon sink trading and Carbon-Negative technology:** We analysed the existing production characteristics, explored the best carbon capture, utilisation and storage (CCUS) route, and plan to have gradual deployment in the future. In terms of ecological carbon sinks, during the reporting period, about 1.21 million new trees were planted, which is equivalent to offsetting about 21,800 tCO_2e[1] per year in the future. In addition, our subsidiary Zijinshan Gold and Copper Mine has reached a framework agreement with the Longyan Forestry Bureau to participate in the development of forest management carbon sink projects, and plans to build about 1.5 million square metres of high-carbon forest mixed with Sequoia and broad-leaved trees to offset GHG emissions.

Case

The Low-temperature Waste Heat Recovery Project of Heilongjiang Zijin Copper has been Completed

In the past, Heilongjiang Zijin Copper had effectively utilised the waste heat of high-temperature flue gas and the reaction heat, which are generated in the process for the production of sulphuric acid from SO_2, to produce power steam. However, over an extended period of time, the utilisation of the large amount of heat generated in the drying and absorption process of the sulfuric acid plant had been greatly restricted due to the strong corrosiveness of high-temperature concentrated sulfuric acid, resulting in long-lasting waste. During the reporting period, Heilongjiang Zijin Copper cooperated with Allgreen to establish a low-temperature waste heat recovery system. The system utilise the large amount of low-temperature heat released during the absorption process of concentrated sulfuric acid to continuously and stably produce 45 t/h of saturated steam at 0.8 MPa (G). In summer, we use condensing steam turbine generators to generate electricity, producing 20 million kWh of electricity each summer. It is used for the heating system in winter to help the Company save energy and reduce GHG emissions.

The Low-temperature Waste Heat Recovery Facility of Heilongjiang Zijin Copper

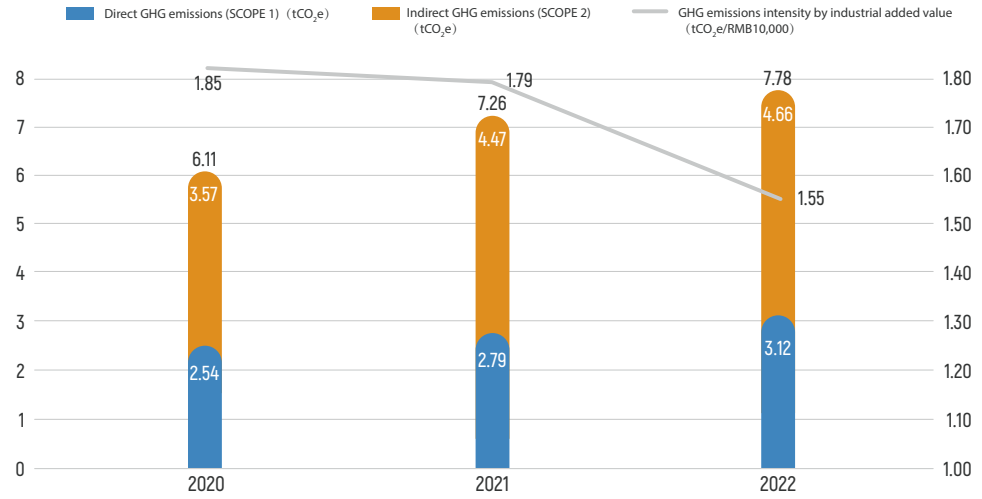
1.Calculated on the basis that each tree can absorb 18kg of carbon dioxide per year.

◎ Clear and Transparent Data

During the reporting period, we formulated the "Guidelines on the Quantification and Reporting of Greenhouse Gas Emissions" and other specific accounting operation guidelines, which unified and specified the overall GHG accounting standards and methods with reference to the IPCC and other international accounting methods. Also, we created a data platform for energy consumption and GHG emissions; GHG accounting was refined for each production section, where the carbon footprint was clearly identified for good production comparison and optimisation. At present, 11% of our mines and smelters completed third-party carbon verification. We also participated in the formulation of the industry standards, including the "Guidelines for the Accounting and Reporting of Greenhouse Gas Emissions in the Mining and Beneficiation of Non-ferrous Metals" and the "Code for Credit Rating Evaluation of Carbon Trading Enterprises" to promote clearer and more transparent calculations of GHG emissions data in the industry.

Although the total GHG emissions during the reporting period were still on the rise up trend due to the increase in output, reaching 7.78 million tCO_2e, with the deployment of energy-saving and decarbonisation transition, our GHG emissions intensity by industrial added value[1] dropped to 1.55 tCO_2e/ RMB 10,000, a year-on-year decrease of 13.4%, down 16.2% from the 2020 baseline year. Overall, it is consistent with the path specified in the "Climate Change Action Plan".

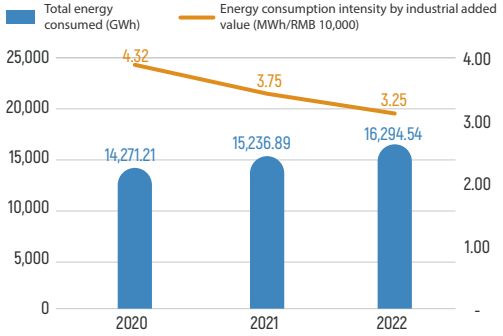
GHG Emissions



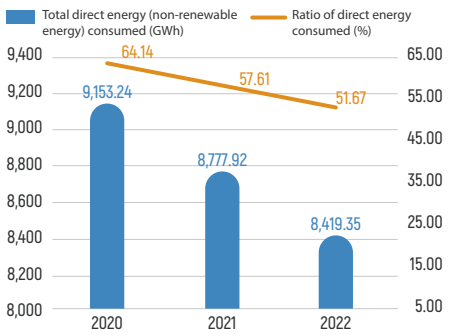
During the reporting period, our total energy consumption reached 16,294.54 GWh (approximately 58,655.64 TJ) due to an increase in production. However, through energy structure adjustment and technological innovation, our energy consumption intensity by industrial added value decreased by 13.3% year-on-year. In addition, our dependence on fossil fuels has been further reduced. The proportion of fossil fuel consumed has dropped to 51.67%, and the proportion of electricity consumed has increased significantly. The proportion of renewable energy in the electricity consumed has reached 32.50%, accounting for 16.21% of the total energy consumed.

1. GHG emissions by industrial value added refer to the emissions generated by the production of the value-added portion in the industrial process. Industrial value added is calculated based on the income approach (i.e. industrial value added = fixed assets depreciation + payments to employee + net taxes on production + operating profit).

Energy Consumption



Direct Energy Consumption



Energy Consumption by Source

Energy type		Unit	2022	2021	2020
Direct energy	Paraffin	Tonne	592	1,481	1,833
	Diesel	Tonne	392,930	345,894	256,856
	Gasoline	Tonne	1,061	1,502	1,457
	Coal	Tonne	560,249	636,682	859,536
	Liquefied natural gas	Tonne	333	372	471
	Natural gas	million m^3	1.785	2.25	1.41
	Other direct energy	TJ	57.16	230.61	425.46
Indirect energy	Electricity	GWh	8,126.68	6,881.20	5,335
	Steam	TJ	-935.7	-802.56	-783.41

Future Plans

1. We will strengthen the monitoring and statistics of GHG emissions data, carry out the investigation of GHG Scope 3 emissions, and promote the joint efforts in reducing emissions with our upstream and downstream industrial partners.
2. We will optimise our portfolio by gradually phasing out assets with high energy consumption and high GHG emissions.
3. We will delegate and implement emissions reduction tasks based on the "Climate Change Action Plan", carry out the climate transition strategies and conduct assessments on the emissions reduction of the subsidiaries.
4. We will continue the cooperation with more institutions to strengthen research in the field of low-carbon transition, mining energy conservation and emissions reduction.
5. We will further cooperate with power suppliers and strive to increase the proportion of renewable energy in power supply.

Our Planet

Zijin Mining has always adhered to the ecological and environmental protection concept that Lucid Waters and Lush Mountains are Invaluable Assets, and to the principle of Balanced Development of Mineral Resources and Environmental Protection. We strive to create green mines with global high standards, while prioritizing the protection of the ecological environment, including clean air, freshwater, soil, forests, energy, and food, which are essential for human survival. By doing so, we aim to create long-term value, fulfil our social responsibilities, and strive to become a Green, High-tech, Leading Global Mining Company.

2022 Key Performance

ISO14001 certification coverage reached

97.5%

Investment in environmental protection

1.467 RMB 100 million a year-on-year increase of **3.3%**

Vegetation area restored

12.75 million m^2

Planted trees

1.21 million

Water re-use rate reached

94.29%

Non-hazardous waste comprehensive utilisation rate was

14.71% a year-on-year increase of **8%**

Note: The statistic scope of this chapter covers all production companies whose operations are under the actual operational control of the Company, including mines, smelters and processors.

Environmental Management System (EMS)

We are well aware that any form of production activities will affect the local ecological environment to a certain extent. As a global mining company, we adopt a risk-based approach and have established an EMS based on the ISO14001 standard. We emphasise lifecycle management. Under the leadership of the Board, all employees are encouraged to strictly abide by relevant laws, regulations and standards of host countries and localities on ecological environment protection during operation. Our ecological environmental management model follows the "Plan-Do-Check-Act" (PDCA) cycle.

With 2020 as the baseline year, our goal is that, by 2023, all production and operation sites will have ISO14001:2015 certification. By the end of the reporting period, the certification coverage had reached 97.5%.

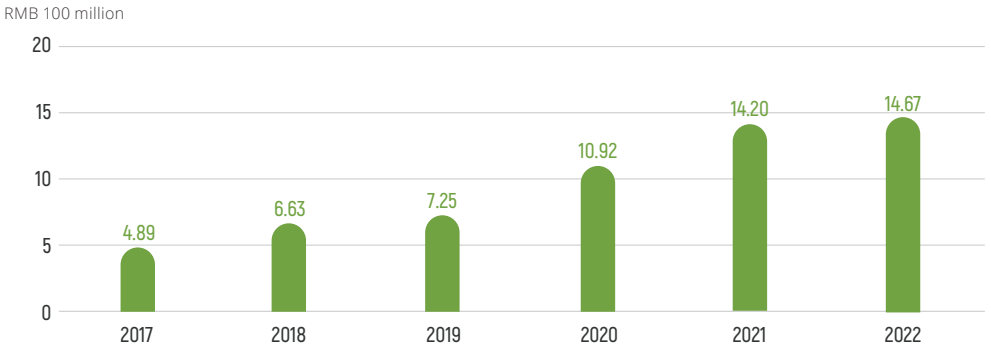
13 National Green Mines
1 Provincial Green Mine

5 National Green Factories
5 Provincial Green Factories

1 National Mine Park

During the reporting period, we invested RMB 1.467 billion in environmental protection, a year-on-year increase of 3.3%.

Investment in Environmental Protection



PDCA Cycle Management

Through closed-loop management, we solve various environmental problems in the loop, while elevating our goals. In addition, we take lessons from past environmental incidents and continuously improve our environmental risk management system for any unexpected emergencies. With the "Emergency Plan for Environmental Emergencies" as the guideline, we developed various operating standards to ensure that the Company can effectively prevent and respond to various environmental emergencies in a timely manner. We organise at least one environmental emergency drill every year to test the effectiveness of the emergency plan, the completeness of emergency preparations, the adaptability of emergency response capabilities and the coordination of emergency personnel.

Plan

We have established an environmental target management system covering all employees, including company executives, as well as contractors and construction parties. Based on the overall targets, we developed corresponding action plans and funding plans to ensure the feasibility of the targets. Under the medium- and long-term goals, we will also develop annual short-term environmental protection and ecological goals, and decompose the goals and responsibilities to each subsidiary, department, and position for specific implementation at different levels.

Do

To maintain the efficient operation of the EMS, we have established an organisational system that is interconnected vertically. Under the leadership of the Production Safety Committee, the Environment and Ecology Department is responsible for managing environmental issues on a full-time basis. We set up a daily environmental protection and ecological management organisation in every subsidiary and each factory or section has its own full-time or part-time environmental management personnel to integrate environmental management concepts into specific business processes and decision-making processes. In addition, we have established an information management platform to standardise and digitise various system documents, archives and processes.

Check

We conduct regular internal environmental compliance inspections of each subsidiary based on policies and standards including the "Regulations on Environmental Protection and Ecological Inspection and Management" and the "Basic Standards for Environmental Order Management". We also regularly entrust authoritative third-party institutions to conduct inspections of mines and smelters to help subsidiaries identify and respond to potential environmental risks in a timely manner. During the reporting period, we conducted environmental compliance inspections on 45 subsidiaries (100%) and at least one external inspection on 95.6% of subsidiaries. In addition, each subsidiary also regularly organises internal environmental audits and rectifications to ensure process compliance.

Act

We establish a list of non-compliant items in environmental activities, require the development of rectification plans, and complete them within a specific time limit. We also regularly track the completion of corrective measures, to continuously improve environmental performance.

Lifecycle Environmental Management

As a responsible global mining company, we adhere to the principle of Environmental Protection Embedded in the Entire Mining Lifecycle and strive to achieve international best practices. From mine acquisitions to closures, we carry out environmental protection and ecological management of mines throughout the mining life cycle. This approach ensures continuity and consistency in our long-term management. We consider the green mining standards and the ultimate blueprint goal from the mine's inception, and we restore the environment while mining, maintaining a pleasant ecological environment throughout the entire mining lifecycle. We also reduce the post-mining lifecycle maintenance costs, creating a solid foundation for the local environment and livelihood after mine closure.

Zijin Mining's Lifecycle Environmental Management

Pre-acquisition

Conduct due diligence on mines and understand basic situation:

- Site environmental investigation
- Geological exploration
- Ecological damage caused by historical operating activities
- Operational status of environmental protection facilities
- Identification of actual and potential ecological and environmental risks

Pre-construction

Conduct environmental impact assessments:

- Investigate the water, soil, vegetation cover, geological and landscape characteristics where the mine is located
- Predict and evaluate the geological environment impacts and damages, potential geological disasters and environmental pollution during project development
- Propose measures for mine geological environment protection and ecological management
- Consider ecological restoration during operation and after mine closure

Production and operation

Adhere to the principle of Risk Prevention First with a Balanced Combination of Prevention and Control guided by risk management:

- Strictly control pollutants, including wastewater, exhaust gas, solid waste and noise
- Progress ecological protection and restoration in a planned way to maintain a stable ecological environment
- Encourage subsidiaries to purchase environmental pollution liability insurance to reduce pollution risks. As of the end of the reporting period, 16 subsidiaries purchased the insurance

Mine closure

Adopt a responsible mine closure management plan:

- Emphasise public health and safety, environmental and social impacts, and sustainable economic development after mine closure
- Actively respond to the demands of stakeholders and jointly discuss the best mine closure management method
- Develop a responsible mine closure plan and funding plan, and take credible actions to leave a green and sustainable legacy for local communities after mine closure

Water

Production activities such as mining, ore-processing and smelting have a strong dependency on water resources. Having clean and safe water resources is crucial for our production and the lives of surrounding communities. Typically, our water sources include surface water, mine water and municipal water, etc. We realise that excessive water consumption will affect the surrounding communities and the environment. Therefore, in the process of production and operation, we place great importance on and continuously improve water resource management and enhance water utilisation to reduce negative impacts on local water resources resulting from our operations.

Our Policy

We strictly abide by the laws, regulations and local policies of the host countries, such as the "Water Law of the People's Republic of China", the "Water Pollution Prevention and Control Law of the People's Republic of China", and the "Environmental Protection Law of the People's Republic of China". We also follow international initiatives and standards such as the "Environment, Health, and Safety General Guidelines", "Mining Industry Environment, Health, and Safety Guidelines", and "Basic Metal Smelting Industry Environment, Health, and Safety Guidelines" published by the International Finance Corporation (IFC). We conduct our business according to the principle of striving for excellence. During the reporting period, we had no significant incidents related to water withdrawal or discharge.

Our commitment to responsible water consumption is enshrined in our "Policy Statement on Water Resources Management", which explicitly states that the Company's Board and management team are responsible for water resource management strategies and performance, and that water resource management is incorporated in our business planning. We established necessary communication mechanisms with affected communities and stakeholders to effectively manage and share water resources and maintain the water balance of the whole basin.

Risk Management

Ensuring water security is crucial for our global operations. Therefore, we tailor our water management based on local contexts. Before water withdrawal, we shall conduct water analysis and assessment, analysing the ***status quo*** of water resource development and utilisation in the basins or regions where the subsidiaries are located, the rationality of water use, the impact of mine construction on water resource and stakeholders in surrounding water bodies, and evaluating the effectiveness of water resource protection measures.

◎ Water Security Risk Assessment

During the reporting period, we used Aqueduct™ Water Risk Atlas, a tool developed by World Resources Initiative (WRI), to conduct annual water risk analysis for 45 subsidiaries, covering physical risk indicators affecting water volume (such as baseline water stress, interannual variability, seasonal variability and drought risk), physical risk indicators affecting water quality (such as untreated wastewater and coastal eutrophication trends), and regulatory and reputational risk indicators (such as drinking water issues and sanitation issues), and adjusting the evaluation results based on each asset's exposure risk coefficient to water stress. The results showed that 5 subsidiaries (11%) are located in high water risk areas (EH ≥ 4). We conducted a detailed evaluation of the water risk and water stress analysis and found that the actual risks of these assets in high-risk areas are controllable and will not have a significant impact on production and operation. In addition, we conducted a multi-scenario assessment of our water security risks based on the impact of climate change on the environment according to multiple time spans (for specific assessment results, please refer to the "Climate Strategy" chapter and Our "Climate Change Action Plan").

Water Withdrawal in Water Stressed Areas

Water withdrawal	Unit	2022	2021	2020
Total water withdrawals in water stressed areas	Million tonnes	10.06	8.81	6.48
Ratio of total water withdrawal in water stressed areas	%	13.84	14.55	12.77

◎ Water Management Plan

We have developed water management plans considering the regional characteristics and risk differences, including different available water sources, local climatic conditions, and the needs of local communities and our operations:

Areas with high precipitation

We address the large amount of pollutants dissolved in the initial rainwater through the pollutant removal and diversion system, with a focus on flood control facilities to prevent the risk of pollutant spillage and dam failure caused by heavy rain.

Areas with a scarcity of water

We pay attention to the freshwater supply of local communities and ecosystems, continuously strengthening water recycling capabilities and minimising freshwater consumption; we also provide assistance to surrounding communities in terms of water withdrawal and purification facilities to alleviate local water stress.

Climate change and extreme weather

Climate change may lead to unpredictable changes in the water environment of the regions. Therefore, all of our flood control projects are designed and constructed with the capacity to withstand once-in-a-century or more severe disasters, and we have developed contingency plans for extreme weather incidents.

Performance and Approaches

◎ Water Withdrawal and Consumption Management

To ensure that the impact of our activities on water resources is minimised and to ensure the security of the rivers and groundwater sources in mine areas, we locate our sites far away from the water sources or the upstream of the rivers. All subsidiaries are required to monitor the water quality of surrounding areas at least on a quarterly basis, increase control over river water quality, and protect the quality and quantity of water available to local communities and other residents in the river basin. We have developed a series of management measures to protect the water resources of the mine areas:

Analysis and Assessment	We require all subsidiaries to: ● Conduct water consumption analysis and assessment prior to water withdrawal ● Prepare a "Water Resources Justification Report" when withdrawing water directly from rivers, lakes or underground ● Assess the impact of water withdrawal and discharge on surrounding communities and other stakeholders
Model-based Management	We use the "Water Balance Model" in each mining area to plan water management. By predicting the annual water withdrawal, consumption and discharge of the mining area, we conduct water resource-related risk management, and adjust water consumption plans scientifically.
Water Environment Security	We require all subsidiaries to: ● Strictly comply with the regulations of each region for waterproofing treatment for reservoirs, tailings storage facilities, heap leaching sites,etc. ● Establish diversion facilities to collect rainwater ● Set up physical procedures or measures such as seep-proof walls to protect the rivers and groundwater resources of mine areas from being polluted
Water Quality Monitoring	We require all subsidiaries to: ● Set up groundwater monitoring wells in mining areas, surrounding waters and key locations (such as upstream and downstream of tailings storage facilities, landfill sites, etc.) on a quarterly basis at the minimum. ● Install online monitoring systems at all discharge outlets ● Network with the local environmental protection department to achieve real-time monitoring and respond promptly to changes in water quality. As of the end of the reporting period, all subsidiaries with drainage processes were fully covered with online water quality monitoring

We commit to maintaining our overall water re-use rate of no less than 90%, and reducing water intensity by 10% from 2020 by 2030. To achieve this goal, we take the following measures:

Improving Source Water Efficiency

We take source control and optimisation measures for our acid mine wastewater and recycling measures for beneficiation wastewater and smelting wastewater. During the reporting period, we implemented the Drainage Reduction System Project in Urad Rear Banner Zijin.

Innovating Water Management Technologies

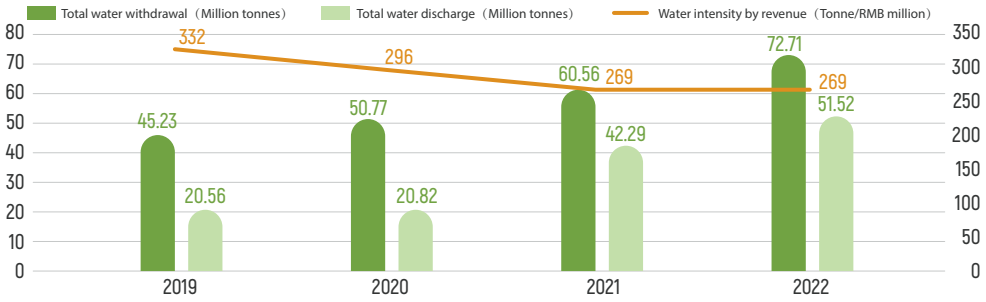
We promote advanced water management technologies, such as the deep treatment and recycling technology for heavy metal wastewater in non-ferrous smelting, circulation utilisation technology for high saline wastewater in hydrometallurgy, and treatment and resource utilisation of acidic wastewater in heavy metal metallurgy to effectively improve water recycling and reducing wastewater discharge.

Digitalisation

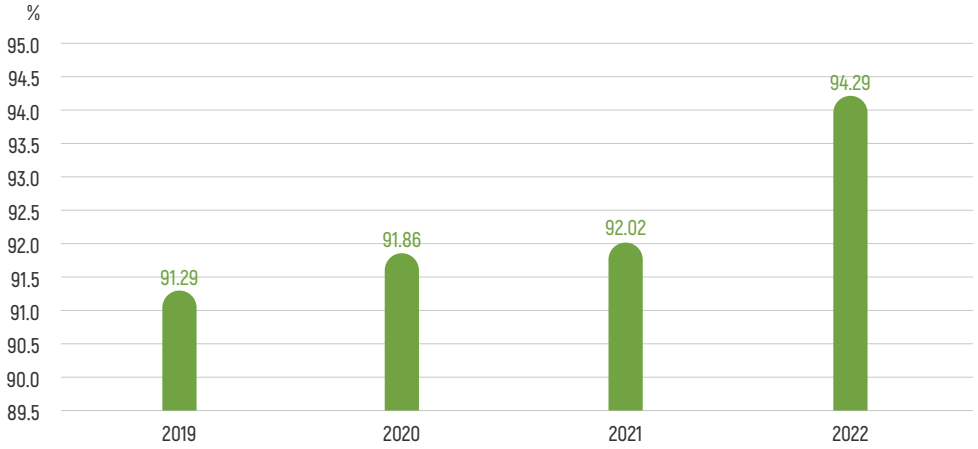
We achieve deep coupling between the industrial water systems and digitalisation, and use data efficiently to optimise water management technology, further reduce the consumption of fresh water and maximise water use efficiency.

During the reporting period, the Company's total water withdrawal was 72.71 million tonnes, with the water re-use rate of 94.29%, and the water intensity by revenue of 269.00 tonnes/RMB million, a decrease of 9.13% from 2020.

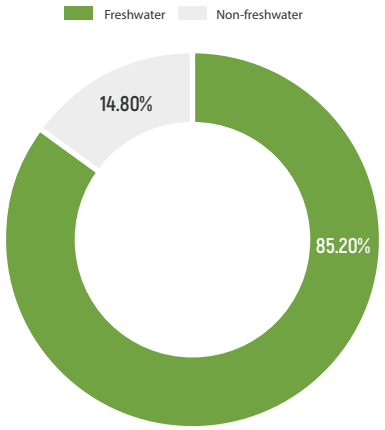
Water Withdrawal and Discharge



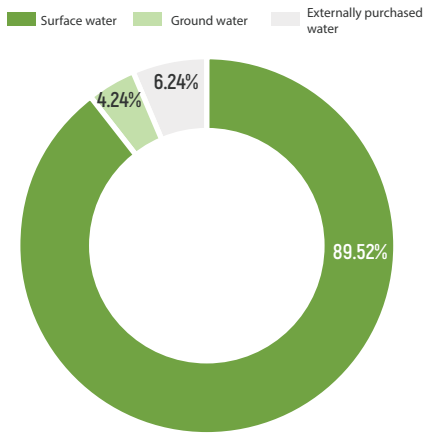
Water Re-use Rate[1]



Water Withdrawal by Water Categories



Water Withdrawal by Water Sources[2]



1. Water re-use rate = (Total water consumption - Total water withdrawal)/Total water consumption
2. Currently, we are systematically reviewing our water balance model. As rainfall cannot be estimated accurately, and it is not an important water resource for our business. We do not disclose rainfall this year and this indicator will be disclosed in the future when the review and improvement of our model is completed.

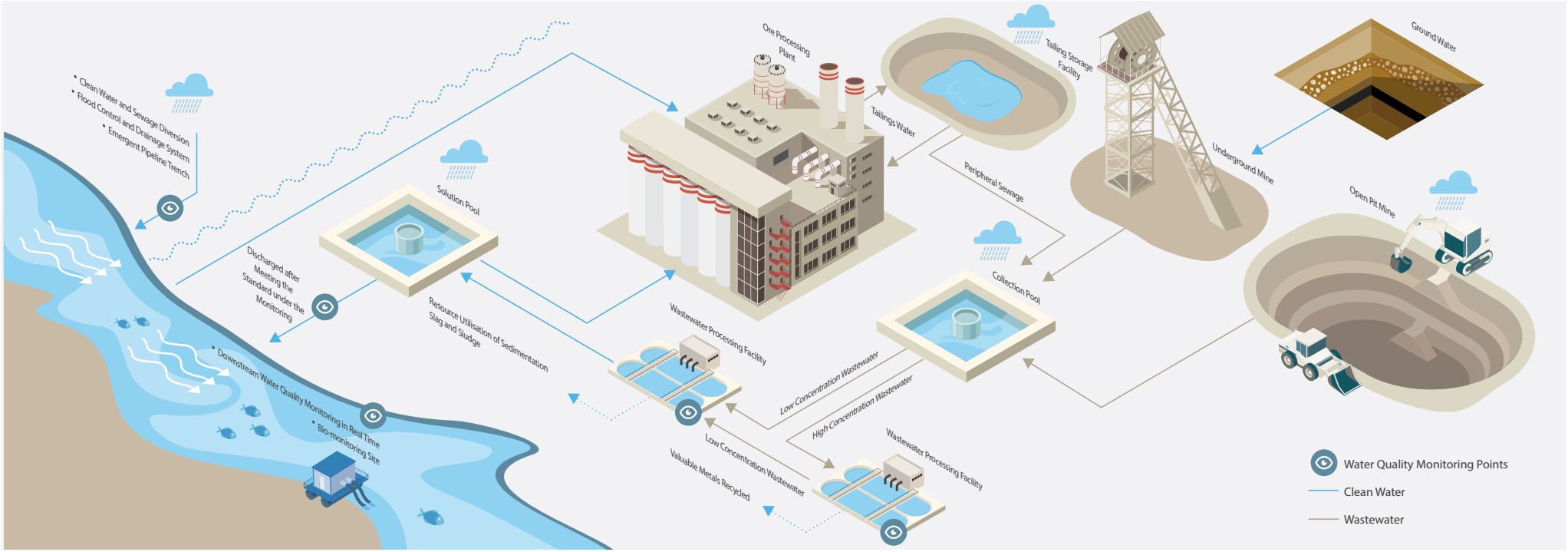
◎ Wastewater Treatment

Our wastewater mainly generated in the processes of mining, metal smelting and processing. Pollutants in the wastewater include acidic and alkaline pollutants, oil pollutants, various heavy metals, cyanide, fluoride and other substances that pose environmental risks. Without reliable treatment and monitoring of wastewater, the pollutants in the wastewater will have a significant impact on the environment on which we and the surrounding communities depend for survival. For this reason, we regard wastewater management as one of the core issues in the construction of production facilities at all operating sites, and continue to be on full alert during operation.

We use our "Environmental Protection and Ecological Information Management Platform" for real-time online monitoring of the information about the total volume of pollutants and pollutant discharged so as to achieve the timely forecasting and early warning of the total volume and concentration of wastewater discharged. We follow the principles of "Rainwater and Sewage Diversion, Clean and Sewage Diversion, Source Reduction, Classified Collection, Treatment Depending on Quality, and Circular Utilisation" to recycle and treat industrial wastewater, domestic sewage, and rainwater separately, ensuring the sufficient utilisation of water resources and meeting the requirements of water cycle management throughout mining life cycle. During the reporting period, our water pollution online monitoring coverage and compliant discharge rate were both 100%.

Regarding acid rock drainage (ARD), we worked with external experts to assess and develop methods to reduce ARD generation in mining areas where it may occur based on the "Global Acid Rock Drainage Guidelines". We incorporate ARD into our overall water cycle system, recovering valuable metals from higher-concentration ARD and then neutralising it with low-concentration ARD, to re-use or discharge it after it meets the standards.

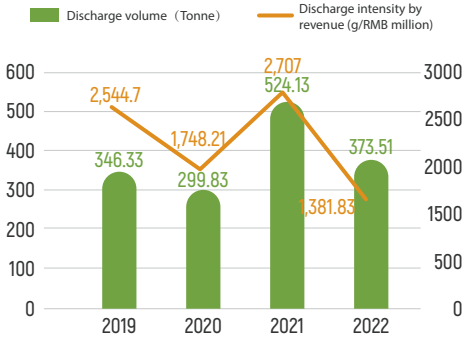
Acid Rock Drainage (ARD)		
Indicator	Quantity	Ratio
Number of mining areas with ARD risk	7	13.46%
- Mines where acid rock drainage is predicted to occur	0	0%
- Mines where acid rock drainage is actively mitigated	3	5.77%
- Mines where acid rock drainage is under treatment or remediation	4	7.69%



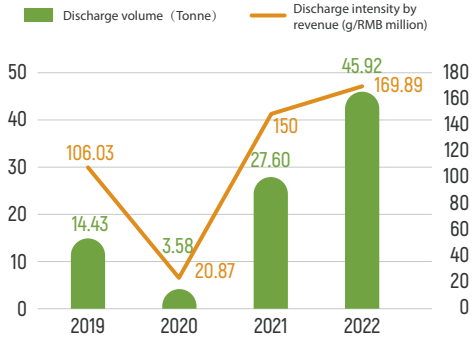
Zijin Mining's Water Cycle System

Zijin Mining's Discharge of Major Water Pollutants

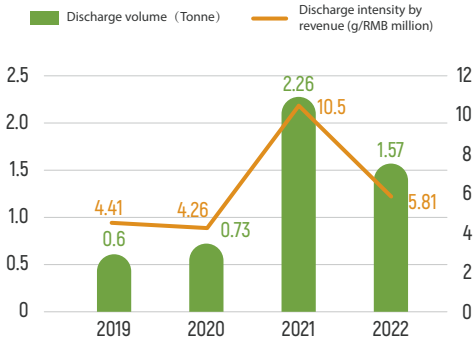
Discharge of COD



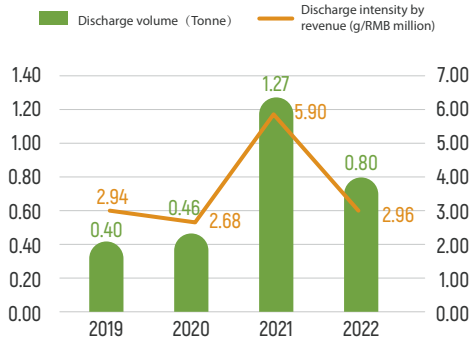
Discharge of Ammonia Nitrogen



Total Discharge of Copper



Total Discharge of Zinc



Achievements in Water Pollution Control in Bor, Serbia **Case**

Due to historical reasons, Lake Robule in Bor City, Serbia was severely polluted and referred to by the locals as the "Red Lake". After Zijin Mining settled in, we continued to eliminate outdated mining processes and commissioned a third party to conduct water quality investigations. Based on the investigation results, we developed treatment plans for various water bodies. After years of treatment and investment, the "Red Lake" wastewater treatment project has now been fully completed. The highly polluted water bodies in the "Red Lake" have been treated by our treatment system and used for our production, reducing our dependence on clean water sources. We will continue our restoration and greening work to ensure that the Bor River will no longer be polluted by the seepage from the "Red Lake".

Images Before and After the "Red Lake" Wastewater Treatment

We have cooperated with the Serbian government to set up an online water quality monitoring system to monitor the heavy metal content in the Bor River and the Pek River. After treatment over two reporting periods, the heavy metal indicators in both rivers dropped by more than 95%, and the decline is expected to continue in the future. We will continue to cooperate with the government, scientific research institutions, NGOs and other organisations and scholars committed controlling river sediment pollutants to explore wastewater treatment methods and providing clean and sustainable water resources for communities and the ecological environment.

Future Plans

1. Further explore the optimised water balance model to plan water consumption in a more scientific manner
2. Improve the efficiency of wastewater treatment, study more adaptable occasions for wastewater re-use, and reduce the withdrawal of freshwater

Ecological Protection and Land Use

The ecological environment is the basis for many ecosystem services that we and our surrounding communities depend on. As a result of our activities, we have a significant responsibility for biodiversity and land management. If mining, exploration, and smelting activities are not managed properly, it may result in adverse impacts on biodiversity and ecosystem services.

Our Policy

Zijin Mining will continue to practice the ecological civilisation concept of Respecting, Conforming to, and Protecting the Nature and adhere to the principle of Developing While Protecting and Protecting While Developing. It applies the mitigation hierarchy of Avoidance, Mitigation, Restoration, and Compensation When Necessary to address the loss in biodiversity. We set up a special fund for ecological restoration and are committed to promoting the restoration and governance of mining areas. By managing the entire life cycle of mines, protecting biodiversity, cooperating with stakeholders to plan land use rationally, and implementing ecological restoration measures, we strive to minimise the impact of mineral resource development activities on the ecosystems in and around the mine areas.

We are well aware that mining activities may cause some land surface disruption. Prior to planning the project and surface disturbance activities, we assess biodiversity hotspots and species in the region, including whether our operations will affect biodiversity. Where negative impacts cannot be avoided, we strive to limit such impacts and restore land, flora and fauna in a timely manner after the activities have stopped.

We recognise the biodiversity crisis emphasised in the "Kunming Declaration" and the "Kunming-Montreal Global Biodiversity Framework" (hereinafter referred to as the Framework) and the importance of transformation for sustainable development. As such, we are committed to strictly complying with international conventions, including the Convention on Biological Diversity and the Convention on Wetlands, during the operations. We will abide by the national laws, regulations and standards related to the biodiversity and those of the host countries. We will play a positive role in maintaining biodiversity in the mine area and commit to developing and implementing biodiversity action plans for all mines by 2030, including:

- Protect rare animals and plants and their natural habitats, and refrain from exploration and mining activities in sensitive areas including nature reserves and ecological red lines.
- Formulate and implement effective goals, plans and measures for air, wastewater and waste treatment, energy and water resources utilisation, to reduce environmental disturbance and pollution caused by mining activities.
- Protect and restore environmental areas affected by mining activities. Gradually restore affected ecosystems and land based on natural methods.

To realise our vision of ecological protection, we have formulated documents including the "Policy Statement on Protection of the Ecological Environment" and the "Guidelines for Biodiversity Work". Our Board and management team are responsible for formulating strategic directions, which are implemented by all the subsidiaries. All our mining areas have formulated and regularly updated the "Mine Geological Environment Protection and Land Reclamation Plans", and will gradually adopt natural-based solutions to address biodiversity issues in the future.

Risk Management

Mining activities may result in a certain degree of land surface damage and foreseeable ecological risks. Therefore, it is particularly important to protect the ecological environment, and identify and prevent ecological risks in mining areas. During project planning and before land-disturbing activities, we will investigate and evaluate the biodiversity and ecosystem health around each mine, and further assess the impact of our operations on biodiversity and the scope of the ecosystem that may be disturbed, and the number and types of threatened species; we will also analyse the possible impacts on the surrounding ecosystems during short-term construction and long-term operation.

Our mine ecological risk identification includes the following steps:

Comprehensive investigation of ecological risks in mining areas

Prior to ecological risk identification, through remote sensing survey, data collection, field survey, and interviews with surrounding communities, we will identify the characteristics of mine ecological environment and mining activities and how such activities disturb the ecological system, covering climate, hydrology, soil, geology, animal and plant types, functions, mine geographical location, ecological protection red lines, important ecologically sensitive areas, mining and mineral types, scope of mining areas, and mining depth and methods, etc.

Identification of risk sources

Due to the multi-faceted and multi-source nature of disturbances caused by mining development, risk sources are often correlated with each other. We classify ecological risk sources into two categories: land damage and environmental pollution. As such, we conduct risk source identification work around the disturbance of mining activities on the ecosystem, identifying risk sources that may have adverse effects on the ecological environment of the mining area through data collection, field investigations, and other means.

Identification of risk receptors

Risk receptors refer to units or areas that are exposed to risk sources, may be subject to damage, and have certain ecological and environmental functions. The ecosystems of mining areas are vulnerable to the disturbance and impact of mining activities and thus become ecological risk receptors. As ecological risks in mining areas are characterised in cross-impact by multiple risk sources, one risk source may have adverse impacts on multiple risk receptors, and one risk receptor may be affected by multiple risk sources.

Identification of exposure-response processes

Through data collection, on-site sampling and monitoring, we identify and analyse the pathways of risk receptors to risk sources (including direct physical effects, water cycle, food chain, weathering, erosion, and diffusion).

Identification of ecological endpoints

Ecological endpoints are the potential damage to ecological risk receptors and the resulting damage to regional ecological structure, systems, and functions under the action of ecological risk sources. By collecting data, conducting field surveys and model simulations, we identify the damage to the ecosystem caused by mining activities.

Reports on environmental impact assessment

After mine ecological risks have been identified, we will prepare an environmental impact assessment report based on the risk identification results, and provide necessary artificial maintenance measures for the unavoidable disturbance to the ecosystem.

Performance and Approaches

◎ Biodiversity Conservation

Biodiversity is essential for human survival. Rich biodiversity is a vital foundation for supporting all forms of life on Earth. We attended the side event on "Mainstreaming Biodiversity Conservation in Mining Investment and Practice in China" of UN Biodiversity Conference (Fifteenth meeting of the Conference of the Parties (COP-15) to the Convention on Biological Diversity) through an online platform, delivered a speech on the theme of "Protecting Nature and Harmonious Coexistence", sharing our practices in biodiversity conservation. At each of our operating mines, we focus on adopting responsible biodiversity management methods, establishing standards and plans for biodiversity conservation, and verify mine restoration. We also develop plans for post-closure ecological restoration.

We set phased goals for ecological protection based on the company's business development. Currently, our goal is that by 2030, all mines will have formulated and implemented biodiversity action plans. At present, 66% of the mines have been implementing biodiversity action plans.

Case

The Rich Biodiversity Surrounding the AGM Project

The surrounding area of the AGM Project provides great biodiversity value. To ensure that our activities will not affect this shared wealth of mankind, we conduct detailed field surveys during each reporting period, with the focus on the annual changes of the birds, terrestrial mammals, amphibians, reptiles and fish in the rainforest near the mining area to understand and track the dynamics of biodiversity.

Through animal surveys, we found that common species around AGM include deer, agouti, capybara, tapir, anteater, armadillo, puma, ocelot, and black plovers. According to the 2022 Biodiversity Monitoring Report, there is a healthy and diverse mammal community around the mining area, with many species having extremely strict and special requirements for their living environment.

In addition, the survey also found that there are 13 bird species unique to the Guiana Shield area and 3 locally protected bird species of Guyana around the mining area, and 7 bird species listed in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species.

During the reporting period, the AGM Project published the Herpetology and Ichthyology Monitoring Report, which recorded 107 individual amphibians and reptiles during the monitoring period, involving 29 species from 20 genera and 12 families. The recorded reptiles and amphibians include frogs, lizards, caimans, and various snake species. At the same time, 324 fish samples were collected at six sampling points.

The appearance of environmentally sensitive species in the survey, such as giant anteater and white-lipped wild boar, indicates that the impact of our business activities on the local ecological environment is minimal. We will continue to conduct investigations and monitoring to achieve sustainable development of the mine and the ecological environment.

We value the protection of ecosystems (such as wetlands, wildlife corridors, protected areas and agricultural land). We conduct biodiversity surveys and assessments before launching new projects and do not engage in exploration and mining activities in sensitive areas, including nature reserves and ecological redlines.

We protect rare animals and plants and their natural habitats. If our subsidiaries involve protected habitats or species, we will manage them according to the specific site planning. We protect unique and precious local plants through the establishment of new botanical gardens, reserves, and wetland reserves, or relocate animals and plants to other areas. We will seek regulatory approval at every stage of a project, to ensure that endangered species and fragile ecosystems are not damaged. We will follow the Framework goals that require immediate action and take urgent management actions to prevent the extinction of threatened species due to our activities.

Ecological monitoring	Up to now, we have carried out ecological monitoring work by deploying wildlife surveillance cameras and using other methods in a number of mines including mining areas in Duobaoshan Copper Industry, Hunchun Zijin, Julong Copper, Xinjiang Zijin Zinc in China, as well as those in AGM, Guyana, Continental Gold, Colombia, and COMMUS, Democratic Republic of the Congo.
Nature-based solutions	We make use of the self-recovery ability of biodiversity in conjunction with scientifically feasible, reasonable and necessary measures, to gradually restore the species structure and ecological functions to the state before disturbance, creating a suitable living environment for species. We retain the soil and vegetation during the mining process for the purposes of environmental restoration, enabling the restored mine to maintain its original natural state. Based on this, we prioritise planting plant species adapted to the mining area's geographic location and climate and conduct long-term monitoring to ensure that the ecosystem maintains normal structure and function after restoration and further enhances the integrity and connectivity of the ecosystem.
Ecological compensation mechanism	With increased awareness of ecological environment protection and research on the ecosystem's service functions, we understand the value of the ecological environment profoundly. By building ecological compensation forests and other measures, we compensate for the damage and pollution to ecosystems and natural resources caused by mining activities, in an effort to offset the damage to biodiversity. During the reporting period, we completed the construction of 1.78 million square metres of ecological compensation forest in the northern and southern Mountains of Lhasa, Tibet, planting 290,000 trees in total.
Building partnerships	We work with conservation agencies, governments, local communities and NGOs to promote biodiversity protection. For example, Continental Gold in Colombia joined the National Animal Protection Organization of Colombia and signed the "Convention on Environmental Protection in the Western Region of Antioquia" with the local provincial environmental protection department; Hunchun Zijin and the Hunchun Bureau of the Northeast Tiger and Leopard National Park Administration joined hands to protect wild Siberian tigers and leopards for the harmonious coexistence of the mine and the surrounding ecology.

Case

Hunchun Zijin's biodiversity survey practice

Shuguang Gold and Copper Mine, operated by Hunchun Zijin, is adjacent to the Northeast Tiger and Leopard National Park (under planning). According to the plan of the national park, Shuguang Gold and Copper Mine will stop operating around 2025 and start mine closure and reclamation. To further understand the impact of our production activities on the surrounding ecology and in support the construction of national parks, we worked with Northeast Normal University and Jilin Normal University during the reporting period, carrying out comprehensive biodiversity survey and sent the results to experts on plants, animals and aquatic biology research for evaluation.

During the survey of forest plants, we set up 29 sampling points in the mining area, tailings area, and restoration area, as well as one sampling point in the control area. The significant difference analysis of various biodiversity index of plants in various sampling points shows that our activities have had no significant impact on plants.

A transect method was used for the animal diversity survey, which was conducted around and across the mining area. The survey shows that our production activities have had no obvious impact on the diversity, population distribution, and quantity of higher animals. Based on our monitoring over the years, as we have continued to reduce the environmental disturbance of mining activities in recent years, the number of key protected animal populations around the mining area has increased significantly.

Our river ecosystem surveys mainly revolved around the Xiangfang River in the mining area, where we investigated the impact of the livelihood and production in the surrounding residential areas and mining areas on the river ecosystem. The results show that the dominant species in the river are pollution-sensitive species with strict requirements for water quality. Although the aquatic biodiversity of each section of the river fluctuates slightly due to the surrounding communities and our production activities, the scope of influence is extremely limited. In the downstream sections of the Xiangfang River beyond the mining area, the original environmental background value is quickly restored.

Based on the survey results, we will continue to cooperate with the government and scientific research institutions to explore the path for harmonious ecological coexistence.

Siberian Tigers Observed around Hunchun Zijin

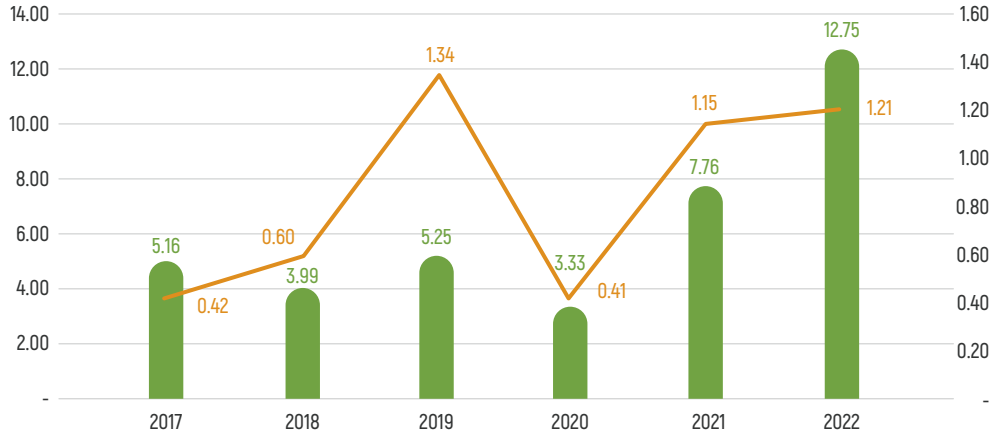
◎ Land Management and Mine Restoration

We roll out the construction of green mines in all operating sites, integrating ecological restoration throughout the entire process of production and construction. We are also in strict compliance with the laws and regulations of the host countries to implement our green, high-quality and sustainable development strategies in geological survey, mining, processing, smelting, and mine closure. For all the land under our management, we always adhere to the following principles:

- We respect, conform to, and protect nature, and coexist harmoniously with nature
- We give priority to ecological protection, striving to prevent or minimise ecological damage and maintain the original ecological environment type
- In terms of ecological governance, we follow the principle of engaging in Production, Construction and Restoration at the Same Time, stabilising and restoring one section of the mining area immediately, giving full play to natural restoration while assisting it with human intervention, so as to maintain the diversity and stability of the ecosystem
- We take into consideration the local natural features and human geography to realise the balance of mining development and ecological environment protection through environmental reconstruction

During the reporting period, we added about 5 million square metres of land with disturbance due to production needs. For areas that have been stabilised and met the restoration conditions (including the areas of land that had been disturbed in previous years), we worked on their ecological restoration based on the local vegetation conditions. With a total investment of RMB489 million in eco-restoration, we implemented 167 ecological restoration projects, in which 12.75 million square metres of vegetation area had been restored and about 1.21 million trees planted, maximising the restoration.

Mine Vegetation Restoration



◎ Mine Closure and Post-closure

In terms of mining development, Zijin Mining follows the principle of Blueprint for Whole-life-cycle. We require that each subsidiary considers a mine closure plan in compliance with laws during the planning and design stage, and this includes establishing the vision for the mine closure, related specific mine closure objectives and land use plans. We also will give full consideration to the mine closure budget, which includes funding required for land restoration after mine closure, follow-up development plans for employees and community residents, and incorporate the future mine closure plan into the initial design and plan of geological and geotechnical engineering and the environmental and social assessments. The mine closure plan shall be updated on a regular basis throughout the mine development process, including closure risk assessment, gap analysis, regulatory conditions and new commitments to the community and other stakeholders, as well as an annual review of the implementation of our recovery plan, to ensure it meets commitments and expectations.

In the whole life cycle management, we carry out customised planning in accordance with the requirements of relevant laws and regulations, based on the functional zoning of our factories and mines, so that we can restore in the process of development, carry out greening work in an orderly manner and allow green land to play its role in purifying air, adjusting climate, and maintaining water and soil. In the process of production and operation, we monitor the surrounding ecological environment, with a constant focus on minimizing our impact and protecting the local ecological environment, so as to lay a solid foundation for the restoration of the ecological environment in the future mine closure.

Future Plans

1. We will further conduct comprehensive survey and monitor biodiversity at all operating sites.
2. Based on the spirit of multilateralism in the Framework, we will maintain an open attitude and cooperate with biodiversity professional institutions for the cause of global biodiversity conservation.

Case

West Copper's Plateau Ecological Restoration is a Success

Qinghai West Copper is located in Guoluo Tibetan Autonomous Prefecture, Qinghai Province, China, with an altitude of 3,400-4,600 m and a typical Qinghai-Tibet plateau climate. During the reporting period, West Copper has ended the mining activities in the Deerni Copper Mine and will start the mine closure after all follow-up operations are completed. With the mission of maximising benefits for the local communities we cooperated with China Enfi Engineering Corporation and constantly communicated with stakeholders to explore the best mine closure management methods, and realise the ideal use of land, so that we can ensure the legacy that we have left behind serves local communities after mine closure in a sustainable way.

The end area of Amne Machin Snow Mountain where the Deerni Copper Mine is located has high ecological value, and ecological protection will become the core work of our mine closure. As at the end of the reporting period, West Copper had invested more than RMB150 million in ecological restoration. Through cooperation with China University of Mining and Technology, Qinghai University, Qinghai Forestry and Grassland Planning Institute and other scientific research institutes, we completed of more than 200 hectares ecological restoration and have accumulated rich vegetation restoration technology and experience in alpine mines. The "Alpine Mine Artificial Vegetation Restoration Project" won the second prize of the Green Mine Science and Technology Award, and has become a model project for mine closure and ecological restoration in Zijin Mining and even in the alpine regions of China.

Surroundings of the Deerni Copper Mine after Ecological Restoration

Waste

Reducing waste generated and increasing recycling rates are necessary conditions for sustainable development. Responsible disposal of the waste we generated, communities and our normal operation. A large amount of waste, including tailings, waste rock, and hazardous waste, is generated during the mining, beneficiation, and processing of ore. Improper waste management may result in negative impacts on the environment and the health of surrounding communities, and the scope of impact may exceed expectations and have far-reaching effects. We select raw materials that produce less hazard, low toxicity, and less waste from the source, and use technological innovation and improvement in the production process to improve the conversion rate of raw materials and the output rate of products. We also recover or recycle waste at the end and store it properly to prevent pollution and minimise the potential impact of waste generated in our production and operations on the ecological environment.

Our Policy

We strictly abide by China's environmental protection laws and regulations, including the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste", the "Pollution Control Standard for General Industrial Solid Waste Storage and Landfill", the "Pollution Control Standard for Hazardous Waste Storage", and the relevant national environmental protection laws and regulations where our subsidiaries are located. We adopt the best international practices to manage our waste emissions with further reference made to the IFC's "Environment, Health and Safety General Guidelines". The Company Board and management team include waste management in our environmental target management system based on the responsibility for emission performance and the formulation of emissions reduction strategies.

Risk Management

We conduct leaching tests on mining waste according to the standard requirements of the host countries, and determine whether it will dissolve and release toxic and harmful substances after long-term immersion, weathering, and stacking, as well as possible risks to the surrounding environment, communities, and water bodies. For solid waste with higher risks, we control and treat it according to the classification of hazardous utilise; for solid waste with low risk, we control and utilize it according to the classification of general solid waste. We use the most stringent benchmarks to identify and manage emissions risks, to prevent environmental incidents caused by incorrect handling of emissions.

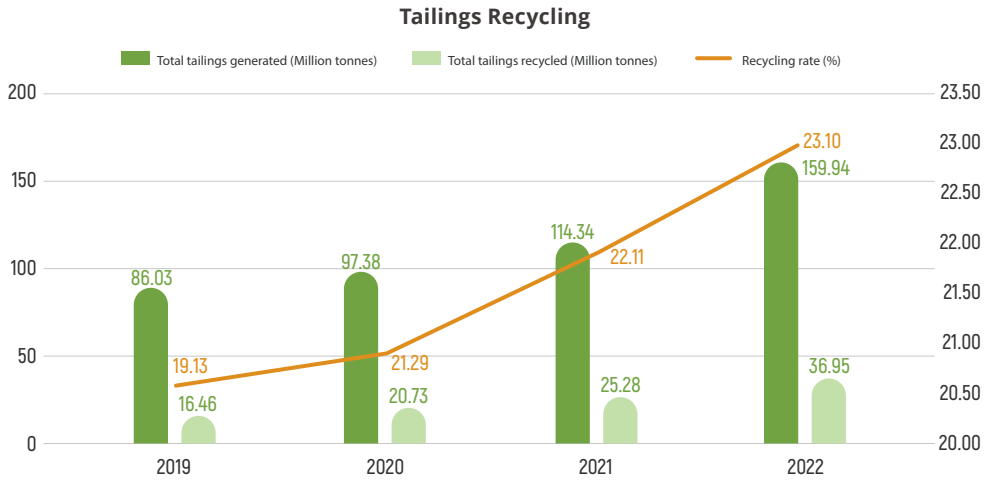
Performance and Approaches

◎ Non-hazardous Waste

For general waste, our principle is Turning Waste into Resources and Utilisation, with the goal to increase the added value of comprehensive waste utilisation products, extracting the reusable elements from waste, thereby reducing the total volume and harmfulness of waste and its impact on the environment. Our goal is that by 2030, the comprehensive utilisation rate of general waste will have increased by 5% compared with 2020.

In terms of volume and quantity, tailings and waste rock are the dominant types of waste generated in our mines. As by-products of mining, tailings are ores with the lowest grade after extraction of valuable metals and minerals that cannot be used for production. Waste rocks are the unavoidable entrainment of surrounding rocks or embedded rocks in the mining process, and the useful components they contain are lower than the marginal grade and cannot be used. Most of the tailings and waste rock generated in our production process are stored in tailings facility or dumps that meet the national standards of host countries and we conduct seepage prevention in tailings facility, discharge of tailings water, monitoring of groundwater environment and soil pollution, emergency management, pollution investigation and treatment, and pollution prevention during and after the site closure, to ensure the safety of groundwater quality at the downstream of the tailings facilities.

To reduce stockpiling and improve the utilisation rate, we give priority to using tailings and waste rocks for underground backfilling and other comprehensive utilisation if the physical and chemical properties permit, to reduce the impact of waste rocks on the surface ecological environment. During the reporting period, the total volume of our tailings was 159.94 million tonnes. Through various comprehensive utilisation methods, the recycling rate of tailings increased significantly to 23.1%, a year-on-year increase of 4.48%. We used mixed tailings and waste rock to fill underground mined-out areas, to achieve a balance between mining and filling, effectively controlling the impacts of ground pressure and underground goaves areas, and preventing surface subsidence and safety hazards. While continuing to improve the internal recycling of tailings, we are also actively exploring external sales channels, expanding channels for tailings treatment and preventing tailings from causing secondary pollution to the environment by selling it to external recycling agencies. During the reporting period, there was a significant increase in the volume of our externally recycled tailings.

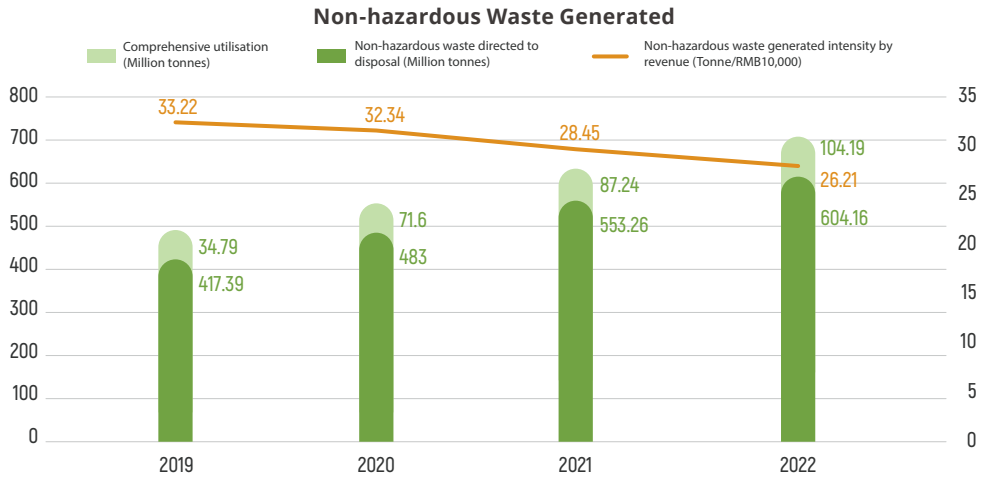


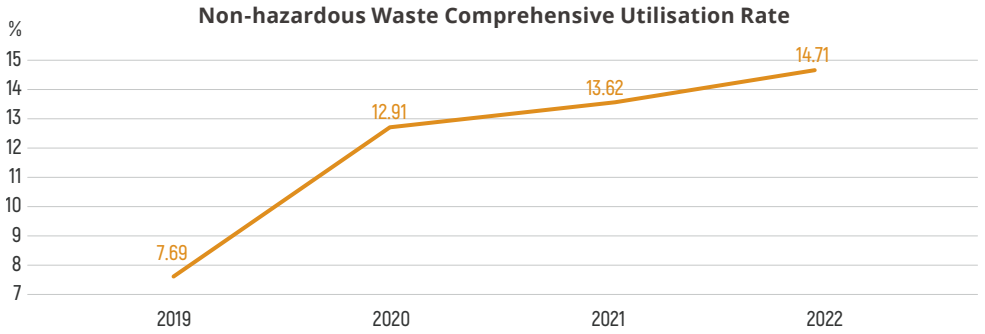
Tailings Recycling					
Indicator	**Unit**	2022	2021	2020	2019
- Internally recycling	Million tonnes	35.61	25.28	20.73	16.46
- Externally recycling	Million tonnes	1.34	0.004	0	0

Tailings and smelting slag, and wastewater neutralisation slag are among the solid waste containing heavy metal elements produced in the process of pyrometallurgy, hydrometallurgy and smelting wastewater treatment. For smelting slag, we have always followed the principle of Reduction, Re-use, and Recycling, carrying out measures including raw material cleaning and process improvement, and using advanced treatment equipment for comprehensive utilisation of waste. We strive to reduce the generation of waste from the beginning, and apply a series of recycling and re-use treatments to the waste before its final disposal to maximise the extraction of any valuable elements while minimising the smelting waste generated. During the reporting period, we carried out the comprehensive resource recovery project of Heilongjiang Zijin Copper, increasing the comprehensive utilisation of waste.

The remainder of processed waste is stored in the slag dumps that meet the national standards of our host countries and that passed inspection of experts, with seepage prevention, monitoring, and emergency response in place for slag dumps in accordance with the local standards to ensure environmental safety. During the reporting period, we completed the elemental analysis of smelting slag, and understood the proportion of various elements in the raw materials, intermediate products, and waste in the smelting process, which facilitates the better subsequent recycling of smelting slag.

During the reporting period, our total non-hazardous waste generated was 708.35 million tonnes. Non-hazardous waste generated intensity by revenue was 26.21 tonnes/RMB10,000, a decrease of 7.87% compared with the previous year, achieved the goal of reduction at the source. The comprehensive utilisation rate reached 14.71%, an increase of 1.09% compared with the previous year.





◎ Hazardous Waste

Our hazardous waste mainly comes from the smelting process, including waste oil, hazardous waste from gold smelting (cyanide slag) and copper smelting (lead filter cake, white smoke dust, arsenic filter cake, copper telluride slag, etc.), and lead smelting (lead silver slag, alum slag, etc.).

In a responsible manner, we strictly follow the pollution prevention and control requirements of the relevant laws and regulations of the host countries, with effective tracking and management of the entire life cycle of materials from the beginning to the end. We use non-toxic and non-hazardous or low-toxic and low-hazardous raw materials to replace those that are highly toxic and hazardous while optimising the original production process and equipment to improve resource utilisation, thereby reducing the hazardous waste generated from the source. During the reporting period, the total hazardous waste generated was 320.81 thousand tonnes, which was 10.20% lower than the previous year, with the intensity by revenue being 25.16% lower than the previous year.

Process of production

In the process of production, we established a hazardous waste management ledger to truthfully record the type, quantity, destination, storage, comprehensive utilisation and other information of hazardous waste generated during production and operation, so as to ensure the traceability of all hazardous waste disposed of.

Transportation

In the transportation of hazardous waste, we seal off, cover and take other measures to prevent the hazardous waste from flying off or scattering.

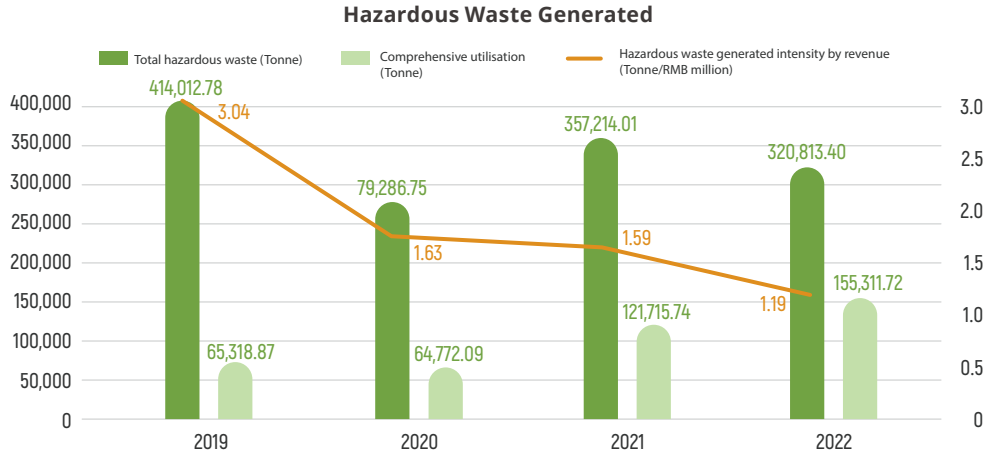
Storage

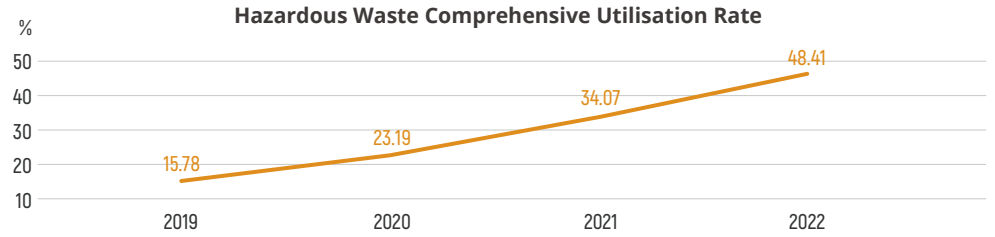
For the purpose of storage, we have set up independent closed hazardous waste storage warehouses that are windproof, rainproof, and sunproof for all operating sites. We post warning signs in accordance with the regulations of the host countries, with effective anti-corrosion and anti-seepage measures and improved investigation system for potential pollution hazards. A comprehensive investigation on potential pollution hazards is conducted at least once a year for hazardous waste storage warehouses, and timely measures are taken to eliminate potential hazards. We also set up environmental monitoring points around hazardous waste storage warehouses to ensure that there is no harm to the environment.

Comprehensive utilisation

In the process of comprehensive utilisation, we take corresponding pollution prevention and control measures to prevent secondary pollution of the environment. For hazardous waste that cannot be recycled or disposed of, we contract qualified professional third-party organisations to dispose of it in accordance with the requirements of host countries, and track the disposal technologies and methods of the third parties to ensure that the hazardous waste we deliver to the third parties is properly and safely disposed of.

With the above measures, our hazardous waste comprehensive utilisation rate reached 48.41% during the reporting period, an increase of 42.1% over the previous year.





Future Plans

1. Based on the results of element analysis of waste, we will continue to improve the comprehensive re-use rate of solid waste.
2. We will explore methods for large-scale utilisation of bulk solid waste such as tailings and waste rocks.

Air Emissions

A large amount of dust is generated in the process of mining, especially in open-pit mining, blasting and underground excavation, and the dust is also spread into the air during ore transportation. It is our duty to reduce exhaust gas emissions and provide clean air. Our main exhaust pollutants include dust from mining, flue gas from smelting, and sulphur dioxide and nitrogen oxides from fuel combustion. We adhere to strict exhaust emission management measures to prevent health problems in surrounding communities caused by our exhaust. We will continue to improve air quality and reduce air emissions to benefit employees, stakeholders and the ecological environment in areas affected by our production activities.

Our Policy

All our subsidiaries follow the air emission regulations and standards of the countries and regions where they are located, and control our air emissions with the highest standards in accordance with the IFC and other international standards.

Risk Management

To protect the health, safety of our employees, contractors, and surrounding communities and good environment and prevent dust from escaping, we have formulated scientific dust prevention and control measures for different working areas, including underground ventilation and dust removal, dust control during crushing and conveyor belt transportation, dust collectors, and dust removing sprayers in open-pit blasting or transportation. We have developed comprehensive utilisation of a large amount of flue gas and dust generated in smelting production, which not only prevents the waste of resources, but also greatly reduces air emissions and the impact of our production activities. The economic benefits brought by the comprehensive utilisation will further promote the continuous improvement of the recycling rate of waste heat, nitrogen and sulphur oxides, and dust in various projects.

Performance and Approaches

Flue gas and dust have a high temperature, which is an important heat source for waste heat power generation and steam production. Recycling such heat effectively improves our energy utilisation efficiency. Flue gas contains a large amount of acidic gaseous pollutants such as SO_2, SO_3, and NOx. It is the main raw material for our by-product sulphuric acid. In the process of acid production, a lot of heat will also be generated, which we fully collect and utilise. The dust contains copper, zinc and other metals and their compounds, as well as precious metals such as gold and silver. We usually return the captured dust to the smelting system for re-use, or harmlessly dispose of it after comprehensive utilisation of the dust enriched with valuable elements. This not only allows us to fulfil the purpose of resource recovery, but also reduces the impact of heavy metals on the surrounding soil. During the reporting period, we focused on promoting the exhaust gas desulphurisation system renovation project in Bayannur Zijin to enhance our capacity of exhaust gas treatment.

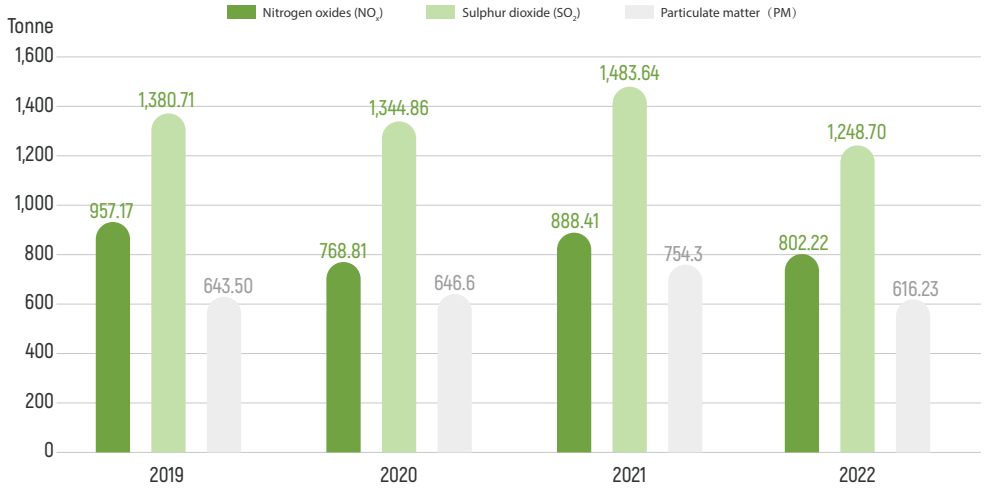
We have installed online monitoring equipment at the flue gas discharge outlets to monitor the total amount of exhaust gas and pollutants in real time. We contract independent third-party testing agencies on a regular basis to test external exhaust gas composition, community air quality, and environmental soil quality as part of our efforts to continuously monitor and control the impact on the environment. In 2022, our emissions of major gas pollutants such as nitrogen oxides, sulphur dioxide, and particulates matter have been significantly reduced. This is due to the fact that our copper smelting assets in Serbia were in the stage of technological improvement and upgrading with production suspended.

In the future, our emissions of gaseous pollutants may increase to a certain extent with the launch of new projects and expansion of production capacity, among other things. However, to ensure an excellent air quality, we will keep the emission indicators of gas pollutants under control as always. On the basis of continuous increase in production capacity, we will take strict measures in controlling the air

emission intensity of pollutants such as nitrogen oxides and sulphur dioxide, to ensure that emissions intensity by revenue in 2023 will not be higher than those in 2022.

We recognise that air quality is of great importance to all stakeholders and are committed to continuously improving the waste gas treatment process to improve the air quality around our mines and smelters. During the reporting period, by share acquisition and by agreement transfer, we took control of Fujian Longking Co., Ltd., China's largest R&D and manufacturing company specializing in electromechanical integration of air pollution control equipment including flue gas dust removal, desulphurisation and denitrification devices. We take advantage of Longking's technologies in waste gas treatment in conjunction with Zijin's rich technological experience in the mining and smelting industries to carry out specialised waste gas treatment according to the emission characteristics of each mine and smelter, and continue to explore the production process with the lowest environmental pressure. Through the above measures, our air emissions have been effectively controlled. During the reporting period, the nitrogen oxide emissions were 802.22 tonnes, with an emission intensity by revenue, of 0.297 tonne/RMB100 million, of a decrease of 34% compared with 2020. The sulphur dioxide emissions were 1,248.70 tonnes, with an emission intensity by revenue of 0.46 tonne/RMB100 million, a decrease of 41% compared with 2020.

Main Air Emissions



Future Plans

We will continue to monitor air emissions and further our technological improvement for high-risk mines and smelters that have become the focus of complaints by communities to reduce emissions.

Case

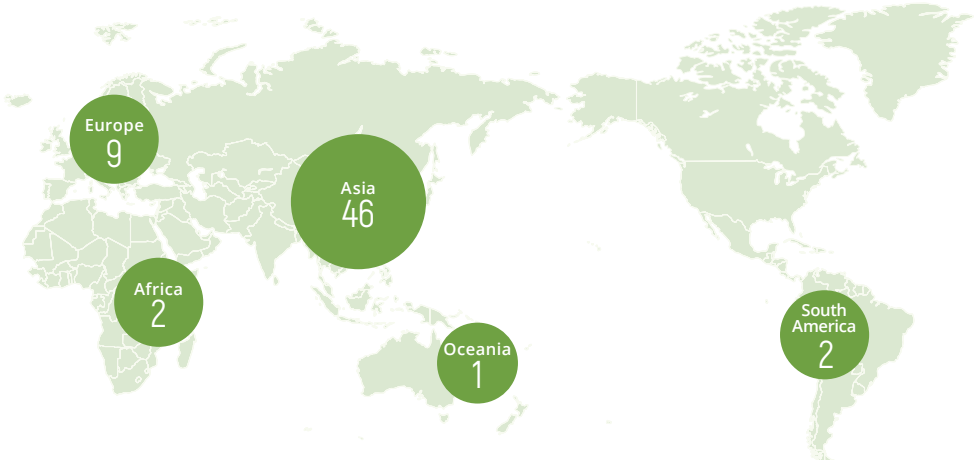
Zijin Copper's Environmental Dust Collection Improvement Project

Zijin Copper has mature dust removal, desulphurisation, and heavy metal removal processes, and actively promotes advanced waste gas treatment technologies in the industry. After several optimisations and improvements, it is using the current process - the "Bag Dust Removal + Sodium-alkali Washing + High-efficiency Wet Electrostatic Demisting" treatment process - where the collected unorganised flue gas is firstly dedusted through the pulse bag filter and then sent to the washing tower for desulphurisation by multi-stage lye spraying, after which, the flue gas passes through the wet electric demister for the removal of fine particles, before it is finally discharged through the chimney.

During the reporting period, the annual average emission concentrations of nitrogen oxides, sulphur dioxide, and particulates were 15 mg/m^3, 7 mg/m^3, and 5 mg/m^3, respectively, which imposed no adverse impact upon local communities.

Tailings Storage Facilities

As of the end of the reporting period, there were a total of 60 tailings storage facilities principally managed by the Company, including 46 in Asia, 9 in Europe, 2 in Africa, 2 in South America and 1 in Oceania.



Our Policy

We take responsibility for the entire life cycle of tailings storage facilities, including closure and post-closure, and make safety in the tailings storage facilities a top priority. We take social, environmental, local requirements and technical factors into comprehensive consideration, and based on excellent practices and centralised risk investigation and rectification during the initial stage, we have formulated the "Whole Life Management Process Standard for Tailings Storage Facilities" and the" Safety Management Specification for Tailings Storage Facilities" with life cycle management of tailings facilities covering design, construction, operation, closure and post-closure. We will follow the principles of the "Global Industry Standard on Tailings Management" and constantly update and improve the management standards.

Risk Management

Given the potential risks, we have conducted a comprehensive risk assessment for all tailings facilities (including the number of potential victims, possible loss of life (health), environmental impact, infrastructure and economy, and impact on social communities). All tailings storage facilities are of low potential risks. We follow China's "Safety Regulation for Tailings Pond" and entrust experts and technical reviewers to evaluate risk management plans, and establish classified review system, to ensure the implementation of the plan and minimise risks. We will also continue to promote the construction of an online tailings facility monitoring system, which will monitor key technical indicators including the infiltration line and displacement of tailings facility and provide early warning accordingly. All subsidiaries have tested and inspected the quality of their flood drainage systems as required, and conducted regular safety assessments on their tailings dams in accordance with relevant regulations in the host countries .

Case

Technological Innovation of Duobaoshan Copper Industry Improves the Safety Performance of Tailings Storage Facility

Since its construction of the tailings facility, Heilongjiang Duobaoshan Copper Industry Inc. has always prioritised safety, greenness and low carbon, creatively introducing a number of technical optimisation measures and rigorously managing potential safety hazards to ensure the safety and smooth operation of the tailings facility, which has played an important role in protecting the safety of people's lives and property and the natural environment.

- **Innovative waste rock dam construction.** The tailings dam follows the idea of an integrated design, where stope stripping of waste rock was used to build the dam once and for all, with a perimeter tailings dam built based on the actual terrain of the site according to local conditions. This can not only effectively alleviate the pressure of waste rock storage in dump sites, reduce environmental pollution, and maximise their storage capacity, but also improve the intrinsic safety of tailings storage, effectively solving the impact of unfavourable factors, including fine-grained tailings stockpiling, overly fast rising speed of the dam body, and permafrost in the freezing season, on the safety and stability of the tailings facility, and greatly reducing the safety risks during the operation period.

- **Optimisation of key facilities and strengthening of risk management and control.** We proposed to set up the cutting-edge accident emergency gates at large-scale tailings facility projects in China, with online monitoring for intelligent interlinked control, to ensure that the accident gates in the branch tunnels can be promptly and safely closed as soon as a safety or environmental emergency occurs in the tailings storage facilities. This allows the disconnection between the tailings storage facilities and the main flood discharge tunnel, thereby reducing the adverse impact of the accident on the external environment.

- **Acceleration in the information-based management of tailing storage facilities.** To actively adopt to the trend of technological informatisation, in order to improve capabilities in risk management and control, monitoring and early warning, auxiliary and decision-making, and practical emergency rescue, we promote the modernisation of emergency management by using advanced "Cloud + Micro-service" architecture and developing an online tailings facility safety monitoring and early warning system, which features real-time monitoring, dynamic early warning, comprehensive trend analysis, and manual and monitoring comparison and analysis, to ensure the safety of tailing storage facilities.

Tailings Storage Facility of Duobaoshan Copper Industry

Our People

The development of a company is inseparable from the support of its employees. Zijin Mining supports the United Nations Sustainable Development Goals (UN SDGs), incorporating good health and well-being, quality education, gender equality, and other objectives into our social performance and commitments. We practise the people-oriented development philosophy, committed to creating a safe and harmonious working environment, becoming a trusted family for our employees.

2022 Key Performance

Number of employees
48,836

Female employee ratio
14.92%

Local employment rate
96.29%

Lost time injury rate per million hours worked (LTIR)
0.29

Total recordable incident rate per million hours worked (TRIR)
0.64

Investment in production safety
21.23 RMB100 million
a year-on-year increase of **42.2%**

Employee Development

Adhering to the Value Creation and Common Development corporate value and Be Value Creator-oriented talent philosophy, Zijin Mining respects labour, workers and their contributions and strives to build a system of hiring that places value creation at the core and shares the fruits with value creators. The Company pushes forward the establishment of a human resources system that is compatible with global development and international standards and development of a centre for attracting various types of global professionals, so as to maximise the well-being of employees and meet employees' aspirations for a better life, in turn attracting and retaining talents.

Our Policy

We follow the UNGPs, the "Universal Declaration of Human Rights" and the ILO "Declaration on Fundamental Principles and Rights at Work" while implementing relevant policies and measures to protect the rights of our employees. We provide training on the "Corporate Code of Conduct" for every new employee upon joining the Company, and require all of them to follow the employee code of Integrity, Diligence, Collaboration, and Fraternity to foster a culture of respect and integrity and promote the creation of a diverse and inclusive work environment.

Protected Rights and Interests	Policies and Regulations
Diversity and inclusion	General Human Resources Policy Corporate Code of Conduct
Equal opportunity and promotion	Job Management Measures
Working hours and leaves	Attendance and Leave Management Measures
Remuneration and benefits protection	Remuneration Policy
Skills upgrading training	Craftsman Training Management Measures
Education and continuing education	Training Management Measures
Talent development	Outstanding Young Talents Management Measures Senior Management Reserves Management Measures Measures for Management of the Training of Fresh College Graduates

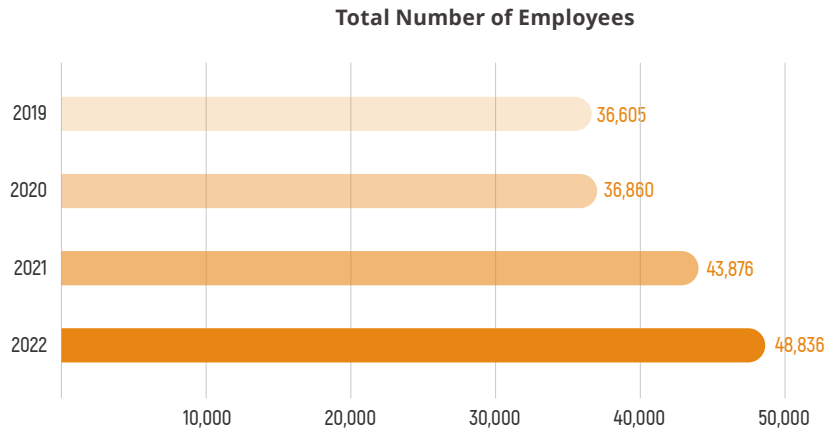
Risk Management

With our operations globalising, we found a contradiction between the increasing globalisation of the Company and the restrictive single-country mindset and management style, which will become a significant risk in the implementation of our future strategies and international operations. Therefore, getting international and diverse talents, as well as talent cultivation and retention, are important tasks for our human resources system. We will focus on solving the international talents shortage problem and mitigating the risks faced in the Company's international development through internationalised, localised, and diversified employment strategies, competitive compensation and benefits plans in the market, diversified employee development mechanism and other measures.

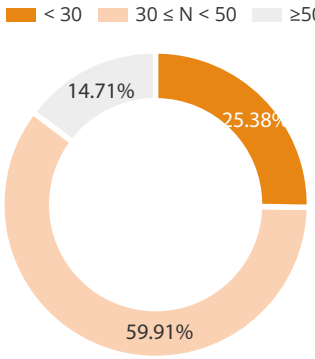
Performance and Approaches

◎ Diversity Strategy

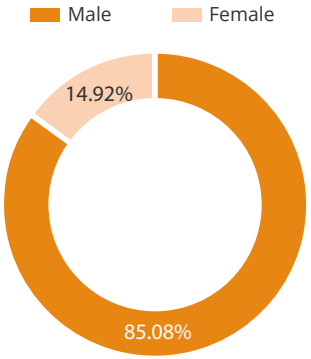
In order to meet the challenges of internationalisation and the scarcity of mining talents, we have integrated a diversified employment policy into our corporate strategy in an effort to build a diversified, internationally competitive and localised talent system and personnel structure. As of the end of the reporting period, the Company had 48,836 employees, with female employee ratio of 14.92%. The contractors reached 28,222. Our employees' composition is as follows:



Employees by Age[1]

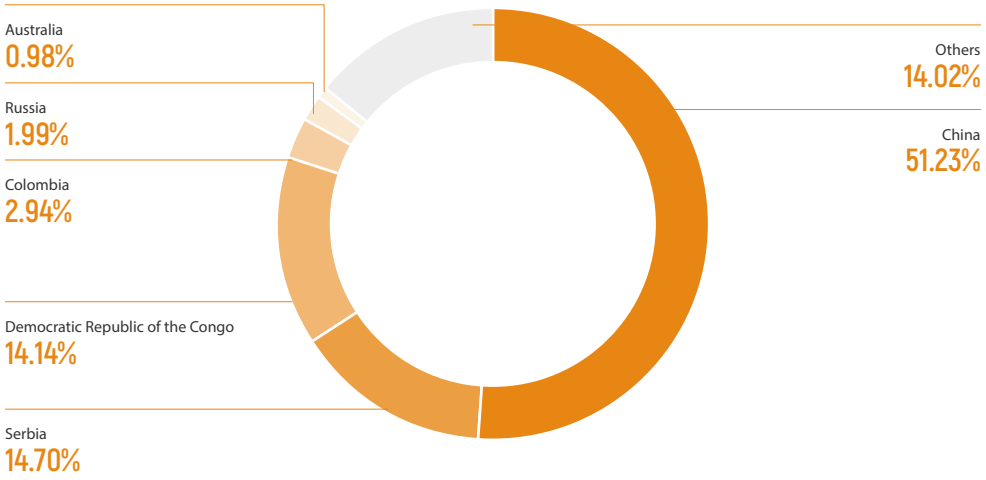


Employees by Gender



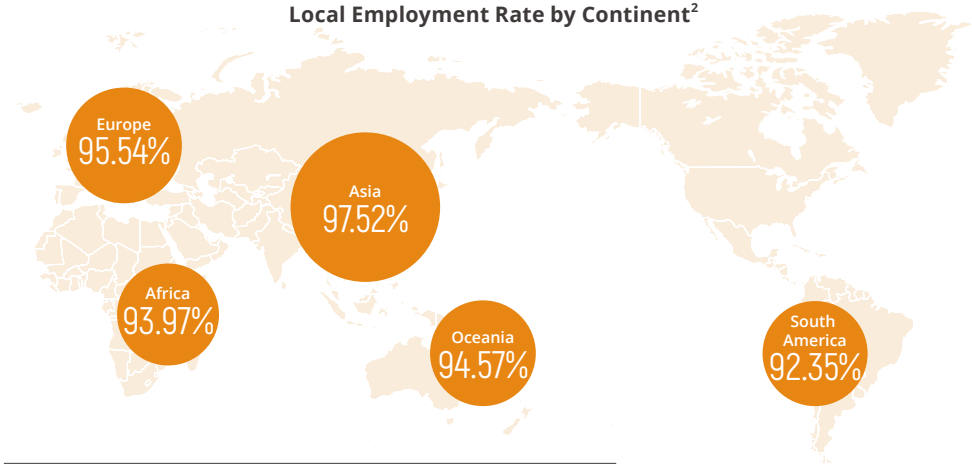
We implement a global talent strategy to build a diverse workforce and create a talent system with a global perspective. During the reporting period, we continued to increase our number of recruits from higher education institutions and countries around the world. Our new hires came from 24 different countries. Employees breakdown by region is as follows:

Employees by Region



We are actively deploying the localised employment policy, hiring and training local talents, formulating annual local hiring plans for senior, middle and junior level management positions in our overseas subsidiaries and proactively addressing employment issues for the countries and regions where our subsidiaries are located. We require all subsidiaries to increase the percentage of local employees in their management team and consider the diversification of nationalities as an important factor in their senior management training programmes. During the reporting period, our local employment rate reached 96.29%.

Local Employment Rate by Continent[2]



1. The workforce statistics were calculated after aggregating the numbers submitted by each subsidiary. Due to local laws or practices on anti-discrimination, protection of personal privacy, etc., certain subsidiaries are not allowed to collect certain information on their employees, such as age and gender. As a result, there are certain discrepancies between the total number of employees in the calculation of the employee ratio in each category and the actual total number of employees . Our disclosure is based on the ratio in the actual statistics, and the number of such employees who are not counted in the ratio of the Company's employees by gender and age in 2022 is approximately 5,390.

2. Local employees: whose nationality is the host country or those who have a permanent residence permit of the host country.

Case

Zijin Mining Sustainable Employment Programme

In 2022, the Company came up with a sustainable employment programme and promoted it worldwide, with the aim of making community residents more competitive in the labour market and enhancing their employability through a series of employment support initiatives such as community enterprise support, employability training, vocational skills training, education training and women's employment improvement. In addition, the Company also focuses on cultivating local talents, hiring managers from local communities, as well as training and promoting local employees to take on management roles.

Continental Gold, our subsidiary, hired 339 new employees in 2022 through the programme, of which 145, accounting for more than 42%, came from direct-influenced areas. Over 70% of the employees are locals of Antioquia, the province in which the mine is located. Among the new hires of Continental Gold, 18.7% are women, bringing the total female employee ratio up to nearly 20%. The female employee ratio at the functional management level is 31%, which tops in the traditionally male-dominated Colombian mining industry. In addition, Continental Gold has also helped 464 women in the community gain jobs through relevant employment support initiatives.

Standing by its "Localised Employment" principle, Julong Copper prioritises providing employment opportunities for the local communities. The Company has set up a targeted commissioned training programme together with Maizhokunggar County in Tibet to send local graduates to Fuzhou University for six months of training. These graduates are then directly employed at Julong Copper after they completed the training and met all requirements. At present, Julong Copper has 899 Tibetan employees, which makes up 54.35% of its total number of employees. Out of these 899 Tibetan employees, 494 are from Maizhokunggar County, accounting for 29.89% of its total number of employees. Julong Copper emphasises on the training and job promotion of its local Tibetan management personnel. Among the 352 management personnel above the deputy position in the Company, 126 or 35.8% are Tibetans. They undertake crucial tasks at various management levels and are trained to become the Company's management reserve force. In 2022, Julong Copper's outstanding practice of promoting employment, learning and job promotion of local employees was recognised by the local government, and the Company was awarded the honorary title of "Advanced Collective in Employment and Entrepreneurship Work" by the Tibet Autonomous Region government.

Continental Gold's Employment Support Initiatives and Achievements

Social initiative	Number of female beneficiaries
Formalisation of ASM, setting up of 11 formalised mining teams in surrounding communities	There are **129** female employees, making up **56%** of the total number of employees
Higher education scholarships	A total of **18** female students have received the scholarship, accounting for **78%** of all active scholarship students
Various agricultural projects (banana cultivation, coffee cultivation, honeybee breeding)	**117** women directly benefited from these projects; **181** women indirectly benefited through cooperation
Local rural enterprise development programme	**84** women directly benefited from the programme
Various types of community companies (e.g., laundry companies, cleaning companies, canteens and uniform customisation)	**84** women employed

◎ Attracting and Retaining Talents

In response to inadequate international talents as Zijin Mining's globalisation and internationalisation process continues to accelerate, in recent years the Company has stepped up its efforts in developing a centre for various kinds of global professional talents and continuously strengthened talent recruitment and training. However, with the development of the society, young talents are growing more and more attracted to new first-tier cities and emerging industries. Furthermore, the mining industry is mostly located in remote areas and its working conditions are more challenging than those in other industries, making it less attractive to talents. As a result, mining companies come under greater pressure to retain talents and face challenge of insufficient talent reserve for long-term development.

Therefore, we have made significant efforts to enhance the recruitment and cultivation of young talents. We have improved our personnel structure to a certain degree, but at the same time also resulted in a higher turnover rate due to the greater mobility of young talents. We believe that this phenomenon is in line with expectations and is normal and manageable.

During the reporting period, we worked with a third party to conduct a full-coverage employee satisfaction survey to understand our employees' views on the Company's values, objectives, strategies and overall environment, so as to effectively diagnose potential problems, continuously improve the Company's management based on the survey outcome and ensure effective alignment of the Company's development with employee aspirations so they will become more dedicated and feel a stronger sense of belonging to the Company. It also ensures the continuous attraction and retention of abundant talent resources and supports employees' long-term growth needs. The survey adopted a 5-point scale, with 5 points indicating strong agreement and 1 point indicating strong disagreement. Following are the results of the employee satisfaction survey:

Employee satisfaction

Over 92% of employees indicated that they understand the Company's vision and goals and are willing to make extra efforts for the Company's development; the overall average score for this item is about 4.7. More than 87% of employees highly agree with the Company's strategy and development, with an average score of 4.5.

Employees' needs

They hope the Company continues to provide employees with high-quality job opportunities, including competitive overall remuneration, benefits that are better than those stipulated by laws and regulations and a safe and healthy work environment.

Employee Turnover

Type of change	Total number	By gender		By age			By region	
		Male	Female	< 30	30 ⩽ N < 50	⩾ 50	Within China	Outside China
Number of new hires	9,648	8,190	1,492	4,848	4,562	252	6,113	3,273
Turnover rate (%)	8.66	8.55	9.33	11.52	7.63	7.48	9.75	6.30

◎ Comprehensive Remuneration and Benefits

In accordance with the Remuneration Policy, we have established a fair and employee development-oriented incentive remuneration structure based on performance evaluation, with basic salary as the core component, equal pay for equal work as a principle, and performance bonuses, allowances, and benefits as complementary elements. This enables employees to receive salary income consistent with their job positions and the value they created, and participate in performance incentive plan. For example, we have set up a restricted share incentive scheme for all employees to build a long-term incentive and talent retention mechanism. During the reporting period, we performed a compensation benchmarking analysis and adjusted our remuneration policy to ensure that all operating sites were offering competitive remuneration to their employees.

We have developed a comprehensive remuneration and benefits plan. To attract more talents from the society, we offer competitive remuneration that are higher than industry remuneration. For our own people, we offer them additional benefits, such as welfare housing, rental subsidies, continuing education support and festival gifts, as well as libraries, medical clinics, gyms and recreational facilities, to enhance employees' sense of happiness and belonging, thereby increasing talent retention rate. Over the past five years, the Company's employee remuneration compound growth rate reached 10.8%.

Three Main Principles of Zijin Mining's Remuneration System

◎ Multi-path Development and Training

Guided by internationalisation, we have established a comprehensive, hierarchical, and extensive education and training system to meet employees' skill enhancement needs. In addition, we have developed a diversified personnel growth mechanism and built three career development paths for all employees, namely administration management, business management and specialised skills. Employees can choose their own path according to their personal intention. During the reporting period, all our employees underwent regular performance and career development assessments.

We encourage and provide financial support for employees to pursue continuing education and obtain various qualifications and certifications. For employees studying for a degree while working, the Company reimburses their tuition and travel expenses; for employees taking time off to study, the Company retains their labour relations and pays their social insurance contributions and basic salary as normal. The Company has also developed a series of training and development plans for different types of employees to fully bring out their value.

During the reporting period, in response to the impact of the COVID-19, we worked with a third party to build a digital learning platform "Zijin iLearning", realising online education and covering different business scenarios to meet the continuous learning needs of our people. The average numbers of professional development training hours for male and female employees are 25.9 and 25, respectively.

During the reporting period, the Company increased its efforts in training, regularly carrying out routine training programmes such as quarterly executive seminars, intensive trainings for excellent young talents, top-performing graduates' trainings, new employee headquarters intensive trainings, and craftsmen intensive training. The average satisfaction rate for the training programmes throughout the year exceeded 90%. We implemented the integration of foreign employees into the Zijin global talent development system, with six foreign employees being selected as outstanding young talents in 2022 and nine being shortlisted for the "Eaglet Plan".

Comprehensive Employee Development Pathways		
Target group	Development direction	Key trainings
Senior management	We have developed training for executives focusing on industry research, language skills enhancement, and corporate and organisational management.	Intensive learning seminars, specialised training courses in geology and mining, etc.
Middle and junior-level management	For the middle management, we have developed different learning plans and training assessment standards according to their administrative positions, ensuring that the management team possesses the necessary professional and managerial qualities.	Specialised training courses in geology and mining, training courses for junior-level management personnel, etc.
Young talents	We have developed programs such as the "Outstanding Young Talent" and the "Eaglet Plan" for training and selecting young talents, aiming to cultivate versatile talents with professional knowledge in various fields and positions.	Outstanding young talent training and talent discussion sessions, etc.
New employees	We assign new employees to dedicated business and career mentors and send them to the frontline for on-site learning, which improves their work ability and helps them understand the Company culture	Top-performing graduates' training programme, training course for new employees
Industrial workers	Through our "Outstanding Craftsmen" Programme, we provide experienced mentors for industrial workers and offer professional knowledge and skills training in geology, mining, mineral processing, smelting and chemical engineering	"Outstanding Craftsmen" training

Employee Training			
By job position	Number of employees trained	Training ratio (%)	Average training (hours)
Upper-level employees	658	100	36.74
Mid-level employees	2,118	88.72	39.12
Entry-level employees	37,760	90.37	24.12

Future Plans

1. Continue to build and improve a global diversified talent recruitment system, optimise the talent structure and focus on cultivating local talents for management personnel.
2. Put more efforts into fostering a diverse and inclusive workplace culture and creating a favourable workplace environment.
3. Implement a comprehensive remuneration and benefits plan to ensure a stable increase in employees' overall remuneration.
4. Incorporate moral character into the assessment of employee promotions and exercise the right of veto on moral character.
5. Expand the coverage of the employee stock ownership plan to increase employee retention rate.

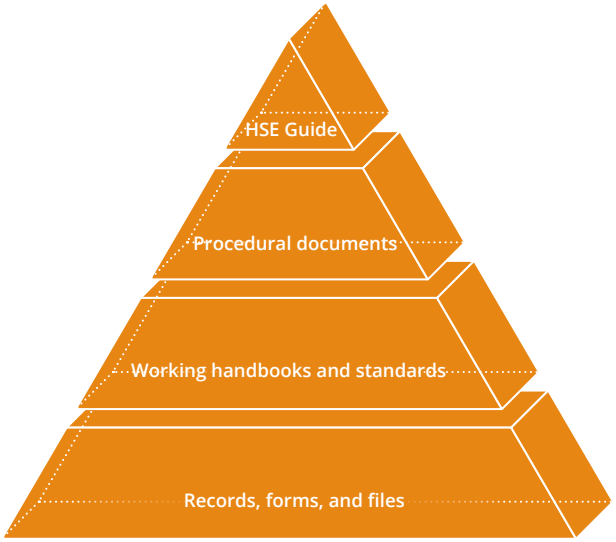
Occupational Health and Safety (OHS)

Personal safety is our top responsibility to our employees and contractors. Zijin Mining regards occupational health and safety as one of its core values and uses the "Ten Safety Guidelines" as a guide for safety management to meet its goal of achieving "Zero Fatalities and Zero Occupational Diseases" for employees and contractors. We will continuously improve our safety management system, effectively manage the occupational health and safety risks associated with production and operations, and constantly improve our OHS performance to ensure the health and well-being of our employees, contractors and the communities where our subsidiaries operate.

Our Policy

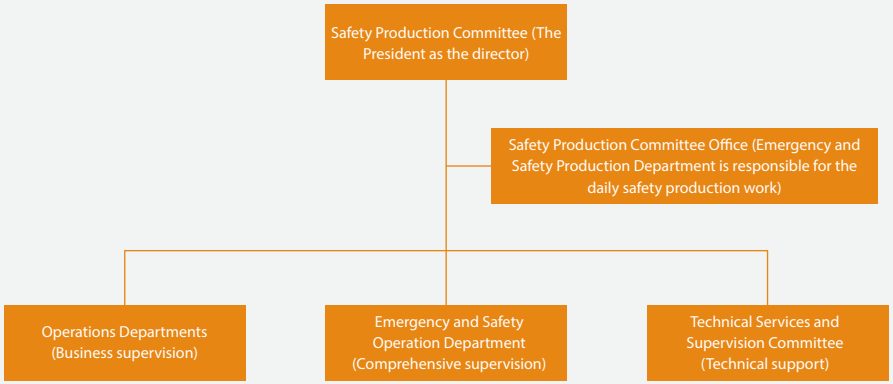
With reference to the ISO 45001 requirements and international best practices, we continuously improve the pyramidal safety management system with Zijin Mining's characteristics. During the reporting period, we further revised and improved policies, guidelines and standards at all levels around policy documents such as the " Policy Statement on Management of Health and Safety" and the "Occupational Health, Safety and Environmental Management Guide". In addition, we issued four safety policies and prepared more than 1,000 "Job Safety Manuals" to provide specific job positions with targeted safety guidance.

OHS System Pyramid



We also formulated OHS system evaluation guidelines and rules, as well as organised the evaluations (internal audits) of the operation of OHS management system of our subsidiaries. At the same time, we entrusted third-party institutions to perform compliance evaluations and inspections, and conducted safety audits (external audits) for some large mines. During the reporting period, a total of 15 subsidiaries came under system evaluation, mainly on the adequacy, suitability and effectiveness of their current OHS management systems, and adopted targeted improvement measures based on the review results. We aim to obtain ISO45001 certification for all production and operation sites by 2023, with 2020 as the baseline year. As at the end of the reporting period, the certification coverage rate has reached 95%.

Zijin Mining Safety Management Organisation



The Company has established a Safety Production Committee (hereinafter "the SPC") with the President as the director, serving as the highest decision-making and coordinating body for occupational health, production safety and public security and fire management. Under the SPC is the Safety Production Committee Office, with the Emergency and Safety Operation Department as the executive department, responsible for the comprehensive supervision and management of the Company's production safety work. Contractors have to assume independent safety production responsibility according to their project contracts and production safety management agreements.

Risk Management

In response to the inherently high OHS risks associated with mining operations, we have implemented classified and dynamic risk management and identified OHS risks and hazards according to the Risk-basd, Risk Pre-control, Dynamic Management principle and the "Measures for Safety Risk Classification, Management and Control and Prevention, Investigation and Management of Hidden Hazards" to ensure that all kinds of control measures remain effective and minimise risks. We focus on the following aspects to carry out risk management:

Whole life cycle control	Place emphasis on source prevention, strengthen risk control during the design phase of operational projects and implement risk control measures throughout the entire construction and production process.
Unsafe behaviour control	To improve the safety awareness and skills of all employees, we implement a safety quality enhancement programme, using multi-dimensional behaviour intervention techniques to enhance all employees' safety habits. We proactively pay attention to employees' physical and mental health, as well as behaviours and habits, guide them to form safe behavioural habits and reduce operational risks that are caused by fatigue, stress, suboptimal and other factors.
Risk changes management	Continuously conduct risk identification, improve the risk list and control measures at all levels in a timely manner. Implement higher-level control on recurring hidden hazards and at critical periods. Eliminate or reduce the potential safety risks that may arise from permanent or temporary changes in personnel, facilities, processes (techniques), etc.
Integrated contractor management	We incorporate contractors into the Company's integrated OHS management system and manage contractors with consistent standards in safety qualifications, team quality and site management. We set up Zijin Construction Group to actively explore the self-management and general contracting model for mining projects to improve the stability of contractors and ensure continual training, in turn reducing contractors' safety risks.

Case

Ashele Copper's Integrated Contractor Management System

Our subsidiary, Ashele Copper, is an excellent practitioner of our integrated contractor management. The two largest contractors it has worked with for the longest time have been fully integrated into Ashele Copper's construction and development process through the years of cooperation. Zero Injuries and Zero Occupational Diseases is now the common goal and pursuit of both parties. Among which, the project department of Xinwang Company, which is one of the abovementioned contractors, has 2,372 consecutive days of safe production and there were no fatalities or occupational diseases for six consecutive years; the project department of Jianhui Mining and Construction has 4,699 consecutive days of safe production and there were no fatalities or occupational diseases for 12 consecutive years.

Performance and Approaches [1]

To further optimise and refine our safety prevention measures, we have independently researched and developed an accident and incident management platform to advocate for openness, transparency, and a no-blame culture and encourage accident and incident reporting and statistical analysis. During the reporting period, despite our focus on various risk prevention and control measures, our lost time injury rate per million hours worked (LTIR), total recordable incident rate per million hours worked (TRIR) and near miss frequency rate per million hours worked (NMFR) went down, unfortunately, three workplace fatalities occurred in our mines, resulting in the deaths of one employee and two contractors, involving fall from height accident, lifting object strike accident, and vehicle injury accident. In response to these accidents, we have conducted in-depth investigations into the causes, analysed and reviewed the main issues including:

Operation against regulations

The main reason for the fall from height was that the surface (rock body) on which the employee stood was unstable. Furthermore, the employee unhooked the safety rope while working and he fell after the rock body collapsed, leading to the accident.

Inadequate control in collaborative work

During the object strike and vehicle injury accidents, as the workers operating the bucket lift and the workers doing shovelling and transportation in the underground work process had insufficient coordination and lack of effective communication, one of the workers was struck by an object and another was knocked down by a vehicle while working.

1.Unless otherwise indicated, these statistics are from the main mines, smelting and processing companies under actual operational control of the Company, and their contractors.

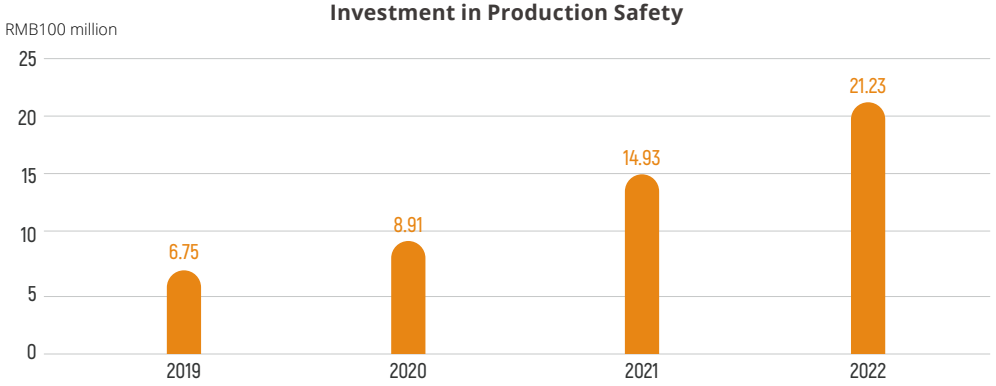
We have conducted a detailed analysis of the defects in our safety management, formulated improvement plans and enhanced employee and contractor safety awareness, risk identification ability, and resolution capability through measures such as publicity and education, skills training, safety hazard inspection, standardised operation, system development, and smart mine construction, thereby improving the intrinsic safety level.

During the reporting period, we accumulatively invested a total of RMB2.123 billion in production safety, which was mainly used for the improvement of safe protection facilities and equipment, rectification of safety hazards, development of safety standardisation, safety education and training, etc.

Production Safety Performance

Indicator	Unit	2022	2021	2020	2019
Number of employee fatalities	Person	1	4	0	0
Number of contractor fatalities	Person	2	4	2	1
Lost days	Day	12,940.00	2,540.75	5,909.50	4,448.25
Lost work hours rate per million hours worked[1]	/	494.38	105.62	328.35	251.88
Lost time injury rate per million hours worked (LTIR)[2]	/	0.29	0.30	0.33	0.89
Total recordable incident rate per million hours worked (TRIR)[3]	/	0.64	0.68	0.69	1.37
Near miss frequency rate per million hours worked[4]	/	0.14	0.18	0.07	0.16
Total number of hours worked	Million hours	209.39	192.44	143.98	141.28

Investment in Production Safety



◎ Fostering a Safety Culture

We insist upon giving employees continuous occupational health and safety training both in their orientation period and throughout their employment, as well as utilising assessments to ensure that all employees and contractors have comprehensive knowledge of occupational health and safety. In order to enhance the safety awareness of all employees, we have also launched the "Zijin Safety Academy" online learning system and compiled independent learning knowledge manuals, so that employees can acquire occupational health and safety knowledge online at any time. In addition, we carry out occupational health knowledge promotion and activities from time to time to continuously strengthen the safety awareness of our employees.

During the reporting period, we set up the Zijin Safety Skills Training Centre. It is equipped with different types of professional facilities such as the safety theory examination site, the skills practical examination site and the simulation training base. Through comprehensive safety system practical training, simulation and examination, our people received standardised simulation and training before starting their jobs, which enhances their ability to operate safely.

Safety Training Data

Indicator	Unit	2022	2021	2020
Cumulative number of attendances of safety training by current employees	10,000	44.94	33.43	23.97 (excl. contractors)
Number of training sessions per current employee[5]	/	5.3	5.0	6.8 (excl. contractors)
Number of hours of safety training per current employee[6]	Hour	30.7	/	/

1. Lost work hours rate = Lost work hours due to work-related injuries ÷ Total number of hours worked x 1,000,000
2. Lost time injury rate (LTIR) = Number of persons with lost time injury ÷ Total number of hours worked x 1,000,000
3. Total recordable incident rate (TRIR) = Number of persons with recordable incident injury ÷ Total number of hours worked x 1,000,000
4. Near miss frequency rate (NMFR) = Number of near misses ÷ Total number of hours worked x 1,000,000
5. Safety training indicator data involving "active employees" does not include the compulsory safety training and education for new employees during their orientation.
6. Cumulative number of attendances of safety training by current employees and the number of safety training sessions and hours of safety training per current employee are counted based on annual centralised safety refresher training and education, which exclude pre-shift meeting learning, technical safety briefings, etc.

◎ Hazardous Chemicals Management

We implement regulations such as the "Hazardous Chemicals Safety Management Code", and strictly follow international management standards and laws and regulations of the host countries related to hazardous chemicals. We adhere to the"Minamata Convention on Mercury" and are committed not to using mercury to extract gold and not to accepting gold produced by third parties using mercury. For the elemental mercury that may be contained in natural ores, we treat it in the mineral processing and smelting process and then discharge it in compliance with the relevant regulations. The Company carries out proper safety management in the procurement, transportation, production, storage and use of hazardous chemicals, including cyanide, by:

- Refrain from using and producing chemicals that are prohibited by the laws and regulations of the host countries and international conventions;
- Design storage depots for hazardous chemicals according to specifications and install relevant emergency facilities according to the required standards;
- For the receipt, recording, locking, transportation, and use of highly toxic chemicals, strict dual-person management is implemented. All operations are subject to cross-checking, and violation of regulations is strictly prohibited.;
- All employees and contractors involved in the storage, transportation, use, and disposal of hazardous chemicals must receive specialised training; and
- Adopt a safety responsibility system for major sources of hazardous chemicals and clearly define the duties and safety management responsibilities of the main technical and operational personnel.

During the reporting period, we did not have any major incidents and fines related to hazardous chemicals, and we did not use any prohibited chemicals.

◎ Occupational Health Management

The mental and physical well-being of all workers are important to us. We are committed to providing a safe and healthy workplace for our employees and contractors, as well as preventing work-related injuries and health damage. We have adopted the occupational disease prevention and control policy of Prevention First, Combining Prevention And Control to implement classified management and comprehensive control of health risks in the production environment. We have made occupational health management plans for all employees, and strictly implement medium- and long-term plans for the prevention and control of occupational diseases.

Physical examination: All employees and contractors are provided occupational health examination conducted by professional examination organisations before they start work, during the employment and when they are leaving the Company. The examination results are delivered to our employees and contractors in the form of a written report.

Health monitoring: We conduct long-term periodic occupational health monitoring for our employees. We keep monitoring and assessment records, and truthfully share the monitoring results with our employees and contractors. In addition, we have a position rotation and change mechanism for personnel at risk of occupational diseases to avoid long-term exposure to health hazards.

Targeting the occupational high risks indicated in the long-term monitoring results, with the OHS risk management system as the basis, we use technological and process advances to gradually reduce the number of job positions with high health risks.

In addition, for the all-round physical and mental health of all employees and contractors, we provide health services such as health monitoring, prevention and control of infectious and chronic diseases and mental health counselling, and create a positive, harmonious and inclusive health culture:

Medical protection

The Company offers medical insurance, work injury insurance and additional medical compensation and work injury compensation for our people, as well as first-aid medical supplies and full-time (part-time) medical staff stationed at the mines.

Healthy lifestyle

"Staff Lounges" are set up at the mines to provide employees with leisure and sports facilities and all types of fitness equipment. Sports and cultural activities, such as sports days, swimming competitions and health-master award, are held from time to time.

Additional health benefits for female employees

We have established exclusivel lounges for female employees, providing sincere care to pregnant and breastfeeding female employees. Professionals are invited to conduct women-themed talks to help women manage their mental health. Additional maternity insurance and benefits are also provided.

Mental health

We regularly organise mental health talks, psychological counselling, psychological tests, psychological guidance and other activities, and set up facilities such as "mental health stations" to alleviate the negative effects of work stress, improve employees' psychological quality and cultivate a positive mindset.

During the reporting period, we launched the healthy company building pilot project at Zijinshan Gold and Copper Mine. The project covers all employees and contractors, which add up to approximately 4,000 people. With focusing on the occupational, physical and psychological health of employees as the core objectives, we advocate a healthy lifestyle among employees through health knowledge popularisation, heathy diet campaign, all-stafffitness movement, smoking control campaign, psychological health promotion, healthy environment promotion and other measures, to balance operations and employee health.

◎ Emergency Management

In our continuous efforts to strengthen our emergency management system, we have built a production safety monitoring and emergency dispatch centre that covers our major subsidiaries. Using new technologies such as AI intelligent identification, underground precision positioning, Internet of Things and big data, we have managed to achieve interconnection and integrated central control of critical risks, important facilities and key areas to significantly enhance our monitoring, early warning, emergency rescue and handling capabilities for major risks, as well as our capacity to respond to any major emergencies.

We require all mines to organise a first-class mine emergency rescue team that possesses extensive expertise. These teams shall be equipped with multiple emergency rescue professionals and equipment, and capability training and drills shall be conducted on a regular basis to respond to all types of emergencies. During the reporting period, our subsidiary, Zijinshan Gold and Copper Mine, was planning to set up a national emergency rescue team, the Fujian Team, equipped with professional rescue equipment through sharing rescue resources and technology with the government. This will be the major force in the mine rescue in Southeast China. In addition, a number of subsidiaries, such as Norton and Continental Gold, bagged awards in several national-level emergency rescue skills competitions.

Norton won the team championship in the Western Australia Underground Mine Emergency Response Competition again

Continental Gold won the championship in the annual Mining Emergency Rescue Skills Competition in Colombia

◎ Infectious Disease Management

Our top objective in infectious disease management is to protect the health and well-being of our employees, contractors and communities. Following the "International Health Regulations" and the recommendations of the World Health Organisation (WHO), we have developed an industry-specific infectious disease management system and require all subsidiaries to implement this system while complying with the local laws and regulations.

In the case of COVID-19, we continue to pay attention to mutated strains of the virus even when countries around the world are gradually relaxing their control measures. We insist on daily disinfection at all our sites, require mask wearing and social distancing when possible, and promote vaccination to reduce the risk of transmission. At the same time, we provide infected employees with professional medical services such as hospitalisation and emergency referrals and support them in home isolation. During the reporting period, we adapted our management approach to the prevalence of COVID-19 to better balance infectious disease management with cross-border business, community exchanges and transportation, ensuring normal business operations during the pandemic period.

Malaria is another infectious disease that has been a long-term concern for us. We have a number of subsidiaries in areas where malaria is endemic. We reduce the risk of malaria infection of our employees and the communities at our project sites by providing training on malaria prevention and treatment, strengthening employees' and contractors' self-health monitoring, and stepping up on environmental management of the area and mosquito elimination. In addition, we have clinics at the mines which hold specialised medication to ensure that employees receive prompt medical assistance.

In addition, we monitor in real time emerging infectious diseases such as monkeypox, implement preventive management measures as recommended by WHO and provide medical assistance to our people, when necessary, to ensure the health and well-being of our employees and the communities.

◎ Intelligent Mine for Better Safety

We believe that the development of science and technology is the greatest booster to intrinsic safety, as well as the fundamental solution to reduce risks and eliminate hazards. Therefore, we have carried out technical transition work that Replaces Human with Mechanisation, Reduces Manpower with Automation and Makes Possible Unmanned Operations Using Intelligence in all our subsidiaries. Through promoting the use of advanced and applicable technologies and equipment, the most dangerous live work is being gradually transformed to mature processes based on advanced technologies. This reduces the frequency of employees facing high-risk processes, lowers the overall risks of employees and contractors and brings intrinsic safety to a higher level.

Remote Fully Autonomous Mine System of Zijinshan Gold and Copper Mine

Case

In 2022, Zijinshan Gold and Copper Mine deployed its underground mining intelligent shovel autonomous system, achieving collaboration between multiple equipment in the main steps in the work process, such as remote shovelling-loading, automatic driving of mining trucks, remote control of crushing and surface central control centre. A single intelligent control platform has the ability to achieve full coverage monitoring and operation of the entire underground operation.

The system has changed underground live work to remote control from the ground control room, improving the work environment of the employees, effectively reducing the inherent risks of underground operations and significantly improving employees' occupational health and safety.

Automatic Driving Control Platform of Zijinshan Gold and Copper Mine

Julong Copper's "5G+ Autonomous Driving" Mining Truck System

Case

As a designated "National Intelligent Mine Construction Pilot Unit" by the Ministry of Natural Resources, Julong Copper actively promotes the research and application of "5G+ Autonomous Driving" technology. At present, several autonomous NTE mining trucks are in operation. During the pilot phase, 3 to 6 autonomous transport vehicles have been running together, and in the comprehensive promotion phase, it is expected to achieve a cluster operation of no less than 150 autonomous mining trucks. This effectively addresses the challenges of high-altitude and cold, and low-oxygen environments, reduces labour intensity and occupational hazards to workers, and improves the intrinsic safety level.

Future Plans

1. Continue to increase employees' safety awareness and improve their ability to identify safety risks through safety performance evaluation.
2. Continue to conduct in-depth research on smart mines and promote the use of autonomous driving technology to improve the intrinsic safety of mine operations.
3. Advance integrated safety management of contractors and facilitate the improvement of contractors' safety performance.
4. Push forward the building of the national emergency rescue team, the Fujian Team.

Our Society

Mining development can bring sustainable socio-economic contributions to the countries and regions where they operate. Zijin Mining supports the United Nations Sustainable Development Goals (UN SDGs), integrating objectives such as poverty eradication, decent work and economic growth, responsible consumption and production, into our social performance and commitments. We take promoting local socio-economic development and enhancing people's well-being as our mission, mining for a better society.

2022 Key Performance

Direct economic contribution
285.4 RMB billion

Payments to governments
12.8 RMB billion
up **26.7%** from 2021

Local procurement rate
65.2%

Community investment
0.455 RMB billion
up **7.31%** from 2021

Note: The statistic scope of this chapter covers all production companies whose operations are under the actual operational control of the Company, including mines, smelters and processors.

Community

Zijin Mining, with the mission of Mining for a Better Society, converts mineral resources into essential materials of production and living for human civilisation through mining development while growing itself and creating wealth in the process. At the same time, we comply with tax laws and help the host countries and local communities to the best of our ability, allowing them to benefit widely from Zijin's existence. We contribute to the well-being of the host countries, local communities, and stakeholders, working continuously to create value for social progress and a better life for mankind.

Our Policy

We follow international norms and standards such as the RGMPs, the "Ten Principles of the UN Global Compact", and carry out community management under the framework of the UNGPs. At the same time, we work in line with the United Nations Sustainable Development Goals (UN SDGs) by integrating the goals of poverty eradication, quality education, decent work and economic growth, sustainable cities and communities, etc., into our social performance and commitments.

Our "Social Responsibility Policy" and "External Donation Policy" governs the standards of community relations management across our operations.

The Company also engages and communicates with indigenous peoples according to international standards such as the Food and Agriculture Organization of the United Nations (FAO)'s governance of tenure technical guide on "Respecting Free, Prior and Informed Consent (FPIC): Practical Guidance for Governments, Companies, NGOs, Indigenous Peoples and Local Communities in Relation to Land Acquisition", the "ILO Convention No.169", and the "United Nations Declaration on the Rights of Indigenous Peoples".

We respect the rights, cultures and traditions of indigenous peoples and recognise their individual and collective interests.

Risk Management

Support from the community is critical to our operations. If our operations have negative impacts on the community or cause misunderstanding and mistrust in the community due to lack of transparency, we will lose the community support for the continued operation, which might pose a significant business risk to our operations. To manage the operational risks that may arise from community issues, all of the community work we do is based on a community engagement framework. To ensure the smooth operation, we fully communicate with the stakeholders, identify and assess the potential impacts of our operation and jointly discuss solutions. During the reporting period, the Company conducted community project planning reviews for four subsidiaries, namely Serbia Zijin Copper, Serbia Zijin Mining, Continental Gold and Liex. Serbia Zijin Copper and Serbia Zijin Mining provided training on community communication and crisis response to better identify and respond to risks from the community.

We carry out community risk management following the order of Avoid-Reduce-Compensate/Offset. Our risk identification and response plan comprise of the following steps:

- Identify and sort out risks that may lead to community conflicts, and establish a risk matrix;
- Assess the actions and processes needed to eliminate these risks;
- Define the causes (objectives) and expected outcomes (indicators) for these actions and processes;
- Set time frames;
- Designate responsible persons; and
- Update regularly (at least once a year) or when there are important changes in the Company's business or significant changes in the external environment (e.g., review again when new laws and regulations are promulgated).

Performance and Approaches

Promoting socio-economic development in host countries is at the core of our community projects. We share our fruits of economic development with the entire society through the economic contributions we bring to the host countries, such as taxes paid to the host countries and regional governments, employee remuneration and benefits, supplier support and various community investments. We have established a community management structure consisting of our Board, ESG Management Committee and the community management departments in each subsidiary, to ensure that the community work in our operating sites aligns with our ESG policy and relevant international standards.

◎ Community Engagement

Zijin Mining is committed to establishing a meaningful, constructive and positive dialogue with local communities and listening to their voices and demands in order to minimise or mitigate any risks that arise from our production and operational activities. We listen and respond extensively to various stakeholders' expectations and demands, and we resolve communities' complaints and grievances in a lawful manner through transparent and open communication and grievance mechanism. During the reporting period, we held 778 community meetings, and received 1,879 visits from stakeholders, with over 10,000 community visitors.

Zijin Mining's Community Engagement and Communication Framework

Taking a holistic approach	Identify the affected communities and stakeholder groups	During the planning stage of a project, we conduct a social baseline survey to collect and understand the background information of the communities, including but not limited to geographical information, demographic information, political background, historical legacy issues, religions and cultural values. We also perform social impact assessment to identify the social impact and potential risks of the project on the operational area and identify the affected groups.
Clear communication channels	Provide the affected groups with access to relevant information	In the community engagement process, we share information with the local communities in various ways, depending on the local environment and culture. It includes radio broadcast, social media, websites, publications and a series of face-to-face meetings, for them to fully understand our efforts to mitigate the impact on the communities.
Establishing channels	Listen to the views of the affected communities on the environmental and social impacts brought by our operations	We develop risk mitigation plans and measures based on the concerns of the affected groups and the environmental and social risks that may arise from our operation. According to the results of the social impact assessment and feedback from the communities, we establish a community impact management information database and update it regularly during the course of the project.
Effective implementation	Integrate the views of the affected communities into the decision-making process of our operation	We listen extensively to views and feedback from various stakeholders through communication and grievance mechanism, and fully integrate the voices of the communities, especially those from vulnerable groups (e.g., women, children and indigenous people), into the decision-making process of planning and community programmes.
Monitoring and responding	Set up a communication and grievance mechanism for the affected communities	To ensure effective communication and engagement with the communities and stakeholders, we have set up community relations teams at all of our production and operational sites, which are staffed primarily by local employees. We also have a clear community communication and grievance mechanism to promptly understand and respond to the concerns of the communities.
	Report progress to affected communities and stakeholder groups	We require each subsidiary to regularly review the progress of community communication, assess the effectiveness of the community grievance mechanism and report improvements to stakeholders in a timely manner, in order to form a positive and effective two-way communication and feedback mechanism.

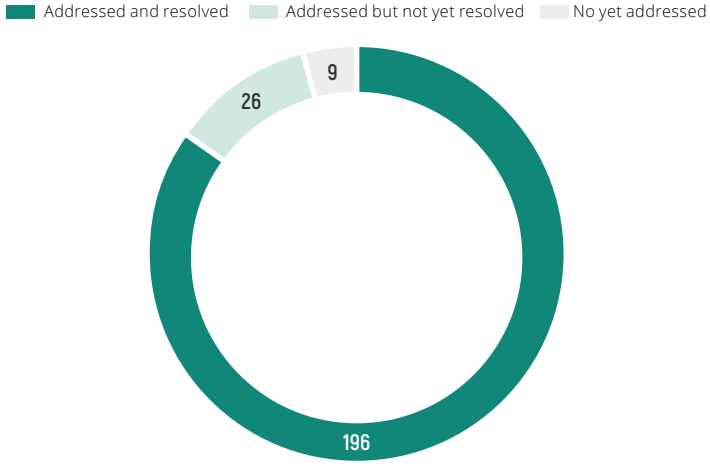
UNGPs Criteria for Evaluating Effectiveness of Grievance Mechanisms

Legitimate	Enabling trust from the stakeholder groups for whose use they are intended, and being accountable for the fair conduct of grievance processes
Accessible	Being known to all stakeholder groups for whose use they are intended, and providing adequate assistance for those who may face barriers to access
Predictable	Providing a clear and known procedure with an indicative time frame for each stage, and clarity on the types of process and outcome available and means of monitoring implementation
Equitable	Seeking to ensure that aggrieved parties have reasonable access to sources of information, advice, and expertise necessary, to engage in a grievance process on fair, informed and respectful terms
Transparent	Keeping parties to a grievance informed about its progress, and providing sufficient information about the mechanism's performance to build confidence in its effectiveness and meet any public interest at stake
Rights-compatible	Ensuring that outcomes and remedies accord with internationally recognised human rights
A source of continuous learning	Drawing on relevant measures to identify lessons for improving the mechanism and preventing future grievances and harms
Based on engagement and dialogue	Consulting the stakeholder groups for whose use they are intended on their design and performance, and focusing on dialogue as the means to address and resolve grievances

◎ Grievance and Communication Mechanism

In following with the UNGPs' criteria for judging the effectiveness of grievance mechanisms, we regularly review the effectiveness of our communication and grievance mechanism, come up with suggestions for improvement and report on progress to stakeholders in a timely manner, promoting a positive and efficient two-way communication and feedback mechanism. During the reporting period, we received 231 grievance reports from the communities and responded to 96.1% of them.

Grievance Reports from the Communities



◎ Regional Economic Contributions

We are committed to maximising our contribution to the economies of the host countries and creating sustainable economic and social value for the local communities and people. We pay in accordance with the law the full taxes, mining royalties and other fees to the governments of the host countries, contributing to local government revenue and improving the lives of the locals. We have a sound tax governance system and effective tax risk assessment and evaluation mechanism, to provide early warning of tax risks, in-process controls and post-assessment for tax risks. We have standardised the whole process management of accounting, declaration, monitoring, assessment, forecasting and reporting of tax-related matters, and strengthened tax management through measures such as developing tax manuals and enhancing training, actively mitigating and preventing tax risks.

We take a firm stance against corrupt tax practices, fulfill our tax obligations in an honest, transparent and cooperative manner and maintain professional cooperation with local tax authorities. Our tax obligations include conducting related transactions in accordance with the Organisation for Economic Cooperation and Development (OECD) guidelines, preparing contemporaneous information documents (i.e., country-by-country reports, main documents, local documents) within the prescribed timeframe and submitting them to the competent tax authorities.

Economic Contributions					
Indicator	Unit	2022	2021	2020	2019
Direct economic contribution	RMB100 million	2,853.94	2,359.11	1,800.15	1,489.2
-Salaries and benefits paid to employees	RMB100 million	91.08	71.51	39.59	37.65
-Payments to suppliers	RMB100 million	2,511.41	2,106.53	1,635.57	1,338.64
-Community donations	RMB100 million	2.51	2.68	1.66	1.78
-Dividend distributed	RMB100 million	81.15	53.75	35.07	31.4
-Interests paid to creditors	RMB100 million	39.53	24.04	23.09	20.48
-Payments to government (tax)	RMB100 million	128.26	100.6	65.17	59.25
Total social contribution value	RMB100 million	509.04	394.83	214.09	169.78
Social contribution value per share	RMB	1.94	1.53	0.84	0.73

◎ Local Employment and Business Opportunities

Creating employment and business opportunities at where we operate is an important way for Zijin Mining to share its fruits of economic development with the local communities. We plan and implement community development programme with a "Teach a Man to Fish" approach to create equal and diverse employment and business opportunities at where we operate and improve the level of local employment. We roll out local employment programmes to promote local employment and entrepreneurship through education, training and internship, thereby raising local employment rates.

Our development projects prioritise local procurement, giving priority to purchasing materials with regional advantages from local suppliers to support local businesses. We actively explore the development potential of the local characteristics and traditional industries to help local industries enhance their competitiveness, and create distinctive industrial brands. We strive to integrate local industries into our global value chain and facilitate global export of local products. During the reporting period, local procurement of goods and services in our mining operations in the host countries accounted for 65.2%[1]. During the reporting period, we updated our local procurement statistics and accounting methods to more fairly reflect our actual situation. The hike in local procurement rates is mainly due to the changes in the accounting account of our total procurement (excluding raw material procurement). We are committed to increasing the local procurement rate in host countries to 70% by 2023.

Case

Continental Gold's Local Entrepreneurial Support and Agricultural Development Programmes

Adhering to the value of Value Creation and Development for All, Continental Gold actively helps local industries develop and shares the fruits of its development with the community. Continental Gold's "Future Harvest" agricultural programme has been carried out for five consecutive years, aiming to help farmers actively develop specialised agriculture. Over the five years, a total investment of 481 million Colombian pesos has been made, participating in or implementing 261 agricultural and livestock entrepreneurship projects, 59 production projects, with 454 community households directly benefiting from the "Future Harvest" agricultural programme, and nearly 10,000 people indirectly benefiting from it. Among them, Continental Gold has focused on supporting the development of the coffee planting industry with local characteristics by establishing coffee production alliances and providing professional training to improve the commercialisation level of coffee in the region.

Continental Gold also actively helps local coffee expand overseas markets, cooperates with various chambers of commerce, and enhances the influence of local coffee brands in the international market to accelerate coffee exports. During the reporting period, Gold Mountains (H.K) and Continental Gold jointly held a Colombian coffee culture workshop to promote local coffee in the Asian market. Continental Gold has also actively cooperated with national institutions such as the Colombian Agricultural Research Corporation (AGROSAVIA), the National Federation of Coffee Growers of Colombia (FNC), and the National Apprenticeship Service (SENA), as well as farmers and entrepreneurs to establish a collaborative platform, funding more than 300 hours of various livestock farming training courses, continuously supporting the implementation of the programmes, and helping local agricultural practitioners increase their income and generate revenue.

Continental Gold Promoted Coffee from Local Communities

Continental Gold's "Future Harvest" Agricultural Programme Guided Local Farmers in Coffee Cultivation

1.During the reporting period, we updated our local procurement statistics and accounting methods to more fairly reflect the local procurement rate, hence there is a large fluctuation between the data of this year and last year.

Case

Liex's Industry-academia Collaboration and Community Training Programmes

In collaboration with the Ministry of Education of Catamarca and a number of local educational institutions, Liex is running a diverse range of joint education and training programmes for community and college students, and providing them with employment opportunities.

Together with the Ministry of Education of Catamarca and the Fiambalá municipal government, Liex is providing skills training for welders. Those who successfully complete the training will receive a training certificate from the provincial government and be given priority for employment. The company has also provided four excavator training sessions for residents of the surrounding communities, two of which were primarily for women. It was the first time women in the local community received heavy machinery operation training, greatly enhancing their employability. In 2022, Liex offered more than 40 sessions of different types of training for the community. Nearly 1,000 local residents took part in the training, of which 40 joined Liex and 120 were employed by various contractors. This effort won recognition and praise from the Ministry of Education, the local chamber of commerce and the community.

In addition, Liex has also opened its pilot plant as an internship base to partner colleges and universities. The company's professional engineers provide special training sessions for college students, allowing them to learn about the lithium carbonate extraction process, environmental protection and sustainability work on site. This raises teaching quality in the local colleges and get local residents trained and ready for technical jobs. In 2022, Liex was visited by over 300 students from nearly 30 educational institutions and colleges, and provided internship positions for local students, who will have priority to join the company after their graduation.

Liex and Fiambalá Higher Education Institutions Signed Cooperation Agreement

◎ Indigenous Peoples and Cultural Heritage Conservation

Mine development inevitably involves relocation and resettlement. We will do our utmost to avoid involuntary resettlement and carry out land acquisition in accordance with applicable laws and regulations and international best practices. As required by IFC's Performance Standard 5, prior to commencing any resettlement activities, we will collaborate with local stakeholders, local law firms, government agencies and migration experts to develop a resettlement plan, in order to ensure that affected indigenous peoples and communities are able to make informed decisions to minimise adverse impacts and restore or improve their livelihoods and living conditions, as well as ensure that affected indigenous peoples are able to get fair treatment, fair compensation and livelihood skills for the future.

During land acquisition and relocation, we follow the requirements of IFC's Performance Standard 8 to, as much as possible, minimise the impact of mine development on or damage to the traditional territories or historically significant cultural heritage of the indigenous peoples around the site. When it is unavoidable, we will work hard to obtain the free, prior and informed consent (FPIC) of the indigenous peoples and reach an agreement through an open and formal negotiation and consultation process to reach a consensus on conservation or relocation with them to minimise any adverse impacts.

Project design/Investment due diligence

Consult with potentially or actually affected indigenous peoples to solicit their opinions; and

Use the information collected to develop policies and procedures for matters related to the indigenous peoples, and incorporate the indigenous peoples' demands into the project design process.

Exploration and construction

Set up community communication teams and mechanisms to maintain regular contact and consultation with the relevant indigenous communities; and

Respect the community residents' right to be informed, and put effort into informing and consulting with the indigenous peoples in advance about significant adverse impacts from resettlement, land and territorial encroachment, destruction of important cultural heritage, etc.

Operations

Respect the rights, interests, aspirations, cultures and natural resource-based lifestyles of the indigenous peoples;

Develop community development plans that incorporate the demands of the indigenous peoples, and carry out work in accordance with the plans and agreements with the indigenous peoples; and

Train all staff who will be involved with or related to the cultures of the indigenous peoples.

Mine closure and post closure

For existing and closed mining areas that require the formulation of closure plans, consult with local authorities, employees, affected communities, and other stakeholders to jointly ensure that social and environmental factors are embedded into the mine closure plans.

Protecting Indigenous Peoples Throughout the Life Cycle of Zijin Mining's Projects

Norton's Cultural Heritage Conservation and Relocation Project

Case

Minimising community impact is Norton's fundamental social responsibility as a gold mining company. The Pitman Walsh Memorial at the company's Binduli South project, built in memory of Detective Inspector John Walsh and Detective Sergeant Alexander Pitman, is regarded as a historical site by the police and family members of police officers, as well as the Kalgoorlie municipal government, local residents and the local historical society. To better protect the historical site and prevent the negative impacts on the facilities of the site and the safety of the public visitors due to mine development, the company has actively engaged with stakeholders, such as the families of fallen officers, the Gold Stealing Detection Unit of the Western Australia Police, the Kalgoorlie Police Department and the Kalgoorlie City Council multiple times on the conservation and relocation plan for the site, and gained the understanding and support from the families and various government departments.

In addition to the Pitman Walsh Memorial historical site, there are up to 22 historical sites of the indigenous peoples in the vicinity, posing a monumental challenge for the development and planning of the mine. While requiring our team to optimise the design as much as possible to avoid these sites, the company also actively communicated with the indigenous groups and built good community relations to ensure that the mine's development plan was endorsed by the indigenous communities.

After consulting several historical societies around Kalgoorlie, as well as the Western Australia Police Historical Society, the Gold Stealing Detection Unit of the Western Australia Police, the Kalgoorlie City Council, Main Roads Western Australia, local indigenous groups and concerned families, with rounds of study and expounding, the company finally put forwards the best way to relocate the site with conservation efforts. The company invited local architects to participate in the design of a monument for long-term tribute. The new monument is intended to add the name list of the people who were involved in the search and rescue effort at that time, and the words will be written in English and the indigenous language chosen by the Sambo family (descendants of the searchers and rescuers).

Norton's Relocation of the Pitman Walsh Memorial with Conservation Efforts

◎ Community Development and Philanthropy

We participate in the development and construction of our operating sites as a community partner in an effort to minimise the negative impact of mining activities on the society and to bring about a lasting, positive social impact for the locals. During the reporting period, we did not identify any actual or potential significant negative impacts on local communities from our operations. We take active measures to plan, develop and implement community development projects and invest in community infrastructure to improve the basic conditions such as local transportation, education, health, environment, safety, medical and epidemic prevention, providing basic conditions for economic development. For vulnerable groups and the impoverished in local communities, we implement targeted poverty alleviation in mind while planning and carrying out a wide array of public welfare projects to support vulnerable groups, providing them with basic subsistence goods and meet their basic needs. We partner host communities and governments to promote socio-economic development. We aim to invest no less than 1% of the Company's annual net profit in community development every year.

Aurora's Indigenous Peoples and Cultural Heritage Conservation Project

Case

During the reporting period, Aurora cumulatively donated about RMB500,000 in cash and in kind to the local Amerindian communities, municipal services departments and non-governmental organisations. It includes financial support (approximately RMB10,000) for the local Amerindian Caria Caria Community Development Council for community development and cultural heritage conservation. September is the annual Amerindian Heritage Month in Guyana, during which most indigenous villages, which are usually impoverished, hold traditional cultural activities. We actively participate in or sponsor relevant activities each year. In addition, the company also supports the education of local indigenous peoples by donating toys and teaching materials to the Caria Caria Primary School of the local Amerindian communities during Christmas and other festivals.

Aurora Donating to the Primary School of the Local Indigenous Community

Zijin Mining's Community Development Projects around the World

Serbia
- Construction of a community service centre
- Construction of a primary school gymnasium
- "Spring Seedlings" education programme
- Zijin Scholarship
- Mining teaching practice
- "For the Future" education programme
- Integration and exchange activities for young Chinese and Serbian employees
- Traditional ethnic music festival
- "Games Without Borders" in Bor
- Sponsorship of football talents in Bor
- Ecological greening of tailings
- Pollution control of the natural water system in Bor
- Donation of an ambulance to the Bor Health Centre
- "Healthy Drinking Water" tap water project
- Community visits to provide assistance

Kyrgyzstan
- Community village river restoration
- Community veterinary centre construction
- Present gifts to an elderly home in Kemin District, an orphanage in Orlovka and needy families and workers during the Kyrgyz Muslim Corban Festival

Tajikistan
- "Chinese Language + Vocational Skills" targeted talent training in mining industry

Russia
- Present gifts to children in the community on Children's Day
- Set up a deer breading fund for local deer breeders

China
- Fujian – Zijinshan: Road construction in Meixi Village, bridge repair in Shizhen Village, park restoration in Tongkang Village
- Xinjiang – Jinbao: Repair walls and lay underground gutters and water pipes for the houses of herders in Bala Erci Village
- Inner Mongolia – Urad Rear Banner Zijin: Rural revitalisation farming project for Menghan Village and Baoli Gegacha Village, road repair for the Baoli Gegacha community
- Fujian – Zijinshan: Construction of schools in nearby villages
- Jilin – Jilin Zijin: Employment assistance project for people with disabilities
- Inner Mongolia – Urad Rear Banner Zijin: Mongolian Obo Festival celebration
- Xinjiang – Zijin Zinc: Reclamation and greening project with a greening area of 270,000 m²
- Tibet – Julong Copper: Plateau mines ecological restoration, reforestation of Lhasa northern and southern mountains
- Qinghai – West Copper: Plateau ecological restoration, restored 2 million square metres in two years

Guyana
- School-corporate internship and employment cooperation
- Local Caria Caria indigenous community development and cultural heritage conservation
- Free community medical services

Colombia
- Community general activities centre
- Community solar lighting
- Community road upgrading
- Community water supply network repair
- Community leadership improvement training
- Community entrepreneurship support
- "Future Harvest" agricultural development programme
- China-Colombia cultural integration event – "A Night of Talent and Culture"
- "Community Food and Culture Festival" event
- Revegetation of native tree species
- Biodiversity offset schemes in the villages of Magote and Angelina
- Sustainable beekeeping and coffee production projects

Argentina
- Construction of the Indómita winery
- Welder training
- Construction of an internship training base
- Excavator training
- Fiambalá community football league
- Donation of materials for the construction of a community hospital and a health service station in Fiambalá
- Construction of a drinking water disinfection system for the Fiambalá community

Peru
- Sports sponsorship in the Andes

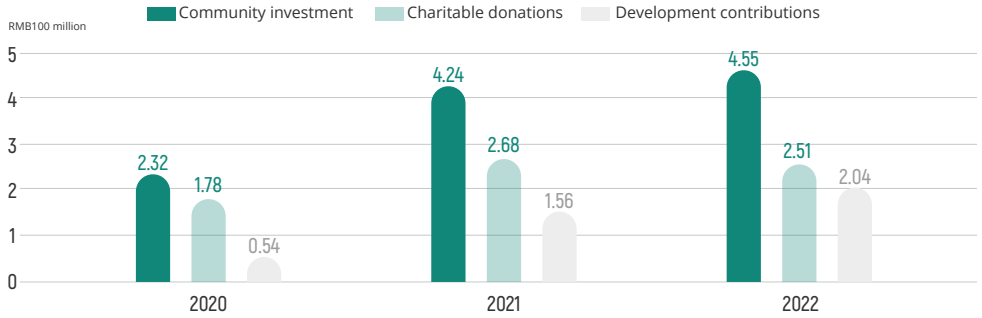
Australia
- Binduli heritage site relocation with conservation efforts
- Planting trees on Tree Planting Day

Democratic Republic of the Congo
- Construction of community infrastructure
- "Zijin Cup" summer camp
- "Zijin Musonoie Cup" football league
- Visit children at orphanage

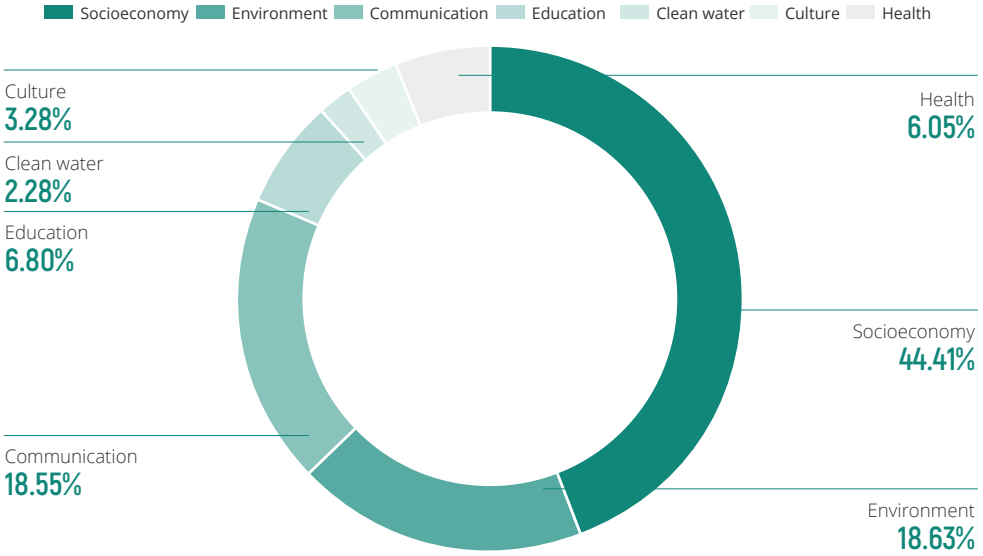
Infrastructure | Education and Training | Culture and Sports | Ecological Environment | Poverty Eradication | Health and Hygiene

When planning community development projects, we fully investigate and understand the conditions, key social issues and development opportunities of the local communities and listen to the demands of community residents. In implementing these projects, we proactively seek cooperation with local foundations or set up development foundations with the local communities, indigenous peoples and other stakeholders to ensure community participation and ownership. We continuously track and monitor the implementation of our projects, regularly review and evaluate their impact and effectiveness and disclose the results to the communities on a regular basis. During the reporting period, our community investment came up to RMB455 million, accounting for 1.52% of the Company's annual net profit, with a 7.31% increase over the preceding year's total investment.

Community Investments



Community Investment by Categories



CARRILU Signs "2022-2026 Community Project Mission Statement"

Case

On 3 February 2022, CARRILU (La Carrière Du Lualaba Société par Actions Simplifiée) held a grand social responsibility statement signing ceremony in Kolwezi to officially sign the "2022-2026 Community Project Mission Statement" with the local government and 27 nearby communities. The project mission statement commits to investing approximately USD3.614 million over five years. The amounts budgeted for 2022, 2023, 2024, 2025 and 2026 are approximately USD939,000, USD685,000, USD600,000, USD745,000 and USD645,000, respectively. The received communities are mainly located in two special zones, namely Lufupa and Liulu, and most are concentrated along the mining transport routes, two of which are in the city direction.

The community projects include construction work for 22 water wells, restoration and expansion of 3 healthcare centres and construction of 3 health clinics, 4 primary schools, 2 secondary schools and 2 farmers' markets, as well as agricultural support projects, installation of ORANGE telecommunication network antennas along the mining transport routes and repair of dirt roads.

During the reporting period, the construction of 18 water wells and the agricultural support projects for 9 communities were completed. The drinking water problem the communities face has been greatly improved, and the villagers now have access to safe and clean water and no longer need to buy water from nearby homes with private wells or travel to canals several kilometres away to collect unsafe water. During the reporting period, the villagers rejoiced over getting maize seeds and fertiliser for the rainy season, saying the food problem of the village would be alleviated in the following year.

With the community projects rolling out, the construction of primary and secondary schools will address the education issue, which is of great concern to people living in the communities; the construction of health clinics and healthcare centres will address problems such as difficulty in accessing medical care in the villages, poor medical care condition and extreme under-capacity of the existing hospitals; and the construction of farmers' markets will replace the dirty, chaotic and poor trading environment in the bazaars with safe and hygienic trading markets. The villages along the mining transport routes have no network signal and are unable to get in touch with the outside world. Installation of ORANGE telecommunication network antennas will completely turn this situation around. Moreover, the dirt road repair project will improve the roads along the mining transport routes that are dusty and not passable during the wet season, thereby improving the local environment quality and traffic conditions.

CARRILU Signed "2022-2026 Community Project Mission Statement" with the Local Government and Nearby Communities

Case

"For the Future" Education Development Programme of Serbia Zijin Mining and Serbia Zijin Copper

As companies with a strong sense of social responsibility, Serbia Zijin Mining and Serbia Zijin Copper fully understand the importance of education and its positive impact on the next generation. We do not wish to see anyone living in surrounding communities have to give up the necessary education due to financial difficulty. Instead, through various improvement measures, we want every family to be able to invest in education and their children to be able to have a better future through education. With this vision in mind, we have developed the "For the Future" education development programme, which has already achieved the following:

- Serbia Zijin Mining has helped to rebuild the gymnasium of a primary school in the nearby village of Brestova. This gives the primary school children in the area a significantly better educational environment in terms of both hardware and software, and allows them to enjoy the same facilities as those of urban schools. The project started in 2020 and is carried out in 3 phases. The first two phases of reconstruction work were completed by 2022. As of today, the total investment was over USD60,000.
- Serbia Zijin Mining has signed a five-year plan with the Bor city government to donate to all Grades 5-8 primary school students in Bor city textbooks that they need in school, as well as one school bag for each primary school student in Bor. In 2022, Serbia Zijin Mining provided 1,645 primary school students in Bor with textbooks for the current semester and all 3,324 primary school students in Bor with one bag each. The total amount spent was USD320,000.
- Serbia Zijin Mining donated a multi-purpose food truck to Bambi Preschool. By doing this, we ensure that all over 1,000 children at the preschool could enjoy hot breakfast and lunch on time. Serbia Zijin Copper also donated teaching equipment worth 200,000 dinars to the preschool to improve the quality of education.
- Serbia Zijin Copper signed an agreement with the Bor district government and 11 secondary schools and vocational technical schools in Bor district to officially establish the Zijin Scholarship. The duration of the scholarship will be 8 years, and 100 outstanding students from Bor will each receive a scholarship of USD700 per year. Eligible students will be selected once a year by the schools in the agreement according to the rules in place.

"For the Future" Programme of Serbia Zijin Mining and Serbia Zijin Copper Improves the Local Education Conditions

◎ Restoring Livelihoods after Mine Closure

We adopt responsible mine closure standards and requirements. All of our operational sites have mine closure plans that are tailored according to local contexts, to reduce environmental, economic, safety and social risks and maintain a healthy, sustainable and prosperous society after mine closure. We require each subsidiary to incorporate mine closure plan in the initial geological and geotechnical engineering design plans, as well as in environmental and social assessments, to set visions, objectives and land use plans for the mine closure, and to allocate sufficient mine closure budget by taking into account the needs for post-closure funding for land restoration, employee and community future development plans, etc. The mine closure plans must be updated regularly throughout the mine development phase, including mine closure risk assessment, gap analysis, regulatory conditions and new commitments to communities and other stakeholders.

We pay attention to the resilience and sustainability of community development and attach importance to cultivate the economic development capability of local communities. We robustly promote the reutilisation of infrastructure post-closure to reduce any negative impact on the surrounding communities and to leave valuable assets for the communities that remain after mine closure, such as developing mine sites into mine parks and building a base of tourism facilities. In addition, we will help local employees and local communities with economic transitional support and strive to find other career development opportunities for local employees. This not only brings the community immediate economic benefits,but also enhances the resilience of the regional economy, enabling it to develop autonomously and sustainably after mine closure.

During the reporting period, West Copper, our only mine in the closure process, continued to carry out environmental and livelihood restoration work, investing RMB800,000 for local education, cultural tourism and rural economic development after the mine closure. This has achieved significant results.

Future Plans

1. Deepen the research on community culture integration and promote the mine open day activities.
2. Further benchmark and summarise outstanding community practices, and compile community operations handbooks.

Responsible Supply Chain

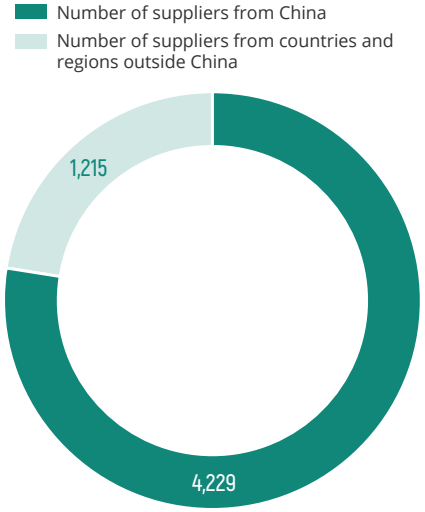
With the vision of To Become a Globally Respected Producer of Green Metals, Zijin Mining requires its suppliers to conduct their business in a responsible and ethical manner, ensuring that their relevant policies on ethics, safety, health, environmental protection, human rights, etc., are generally in line with Zijin's standards, as well as share Zijin's fundamental cultural beliefs. This is a prerequisite for building business partnership with us. As a globally major supplier of minerals and metals with a diverse product portfolio, we focus on responsible supply chain management to effectively avoid economic, environmental and social risks in the mineral supply chain.

Our Policy

Revolving around our core objectives, our responsible supply chain policy uses risk-oriented thinking to push forward suppliers of goods and services and suppliers of minerals and metals to implement ESG policies consistent with those of Zijin Mining and conduct good stewardship. At the same time, we actively implement the local procurement policy in purchasing goods and services, to drive economic development in the host countries (for details on local procurement policy and performance, please refer to "Community").

During the reporting period, we revised and implemented management policies such as the "Supplier Management Measures, "Supplier Code of Conduct", "Policy Statement on Whistleblowing Management", "Policy Statement on Supplier Management" and "Policy Statement on Business Ethics Management" to require suppliers conduct their business responsibly and ethically and to ensure that ethical, safety, health and human rights guidelines related to suppliers are aligned with those of Zijin Mining and suppliers' social and environmental performances are qualified.

Distribution of Suppliers



Risk Management

Our supply chain risk management revolves around performing due diligence for metal and mineral supply chains. We conduct risk-based due diligence on our metal and mineral suppliers according to the five-step framework defined in Annex I of the "OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, Third Edition" (the "OECD Five-step Framework"). Our risk assessment and management strategy aim to identify and assess risks, including those associated with conflict-affected and high-risk areas (CAHRAs). We adopt collaborative risk management and mitigation approaches to human rights risks that are already identified within the supply chain.

Performance and Approaches

◎ Goods and Services

- Supplier Qualification Assessment

We advocate for establishing long-term and stable cooperative relationships with suppliers that are based on integrity, setting up a regular management-level communication mechanism with suppliers, raising suppliers' awareness of fulfilling social responsibilities and pushing forward the building of responsible supply chains. We have stringent regulations on supplier assessment and acceptance in accordance with the Company's "Supplier Management Measures", and grade suppliers on three aspects: environmental protection, social responsibility and corporate governance. In the environmental aspect, we review suppliers' environmental protection management systems and policies, energy consumption and carbon emission data and records of environmental pollution violations. In the social aspect, we review their participation in public affairs, labour rights protection, production safety and negative social records. In the governance aspect, we review their compliance and anti-corruption policies, information disclosure and transparency and negative records on business ethics. Suppliers have to pass on-site visits and centralised reviews be finally be accepted as our suppliers.

To ensure that suppliers' relevant ethical, safety, health and human rights guidelines are aligned with ours, and social and environmental performances are qualified, we have included in the standard purchase agreements signed by the suppliers a clause requiring compliance with our Supplier Code of Conduct.

Our supply chain extends throughout the world. Therefore, we systematically share Zijin Mining's sustainability philosophy, integrity policy, environmental protection philosophy, green procurement policy, etc., through our Yizhi procurement portal. To ensure effective learning and our suppliers follow us in complying with these policies and philosophies, each supplier logging onto our portal can proceed with registration, submit quotations, etc., only after they acknowledge their completion of the learning.

During the reporting period, we conducted qualification review for 2,351 new supplier applications and of which 1,547, or 66%, were qualified as our suppliers.

◎ Goods and Services

- Supplier Review and Assessment

We regularly review and assess the business responsibility practices of all of our suppliers, assessing their risks in terms of environment, safety, and social responsibility and taking corresponding measures. Suppliers found in serious violation of the contract or law will be blacklisted for 1-3 years. Suppliers with major quality problems, significant safety and environmental protection risks, bribery, or being blacklisted for poor production and operation safety records by governments at all levels will be directly removed from our supplier list and permanently banned.

During the reporting period, we conducted on-site review and evaluation of 212 suppliers, focusing on the suppliers' on-site operating environment, production safety conditions, environmental protection measures, employment conditions and other aspects related to social responsibility. Through on-site inspection and centralised review, as well as verification of general problems, we kept a total of 780 critical suppliers, and awarded 5 suppliers with excellent performance the Excellent Collaboration Award and 1 supplier with excellent performance the Excellent Assistance in Pandemic Prevention Award.

Suppliers				
Indicator	Unit	2022	2021	2020
Number of critical suppliers	/	780	745	458
Number of new suppliers selected by ESG standards	/	1,547	762	917
Number of suppliers evaluated by ESG standards	/	2,327	1,507	1,384
Suppliers confirmed as having actual and potentially significant negative ESG impacts	/	3	10	0
- Suppliers which have agreed to take rectification measures	/	0	2	0
- Suppliers with terminated cooperation	/	3	8	0

◎ Metals and Minerals

In the past, Zijin Mining committed to not procuring, processing or selling conflict minerals and passed the audit of London Bullion Market Association (LBMA). During the reporting period, we built a responsible supply chain system with broader coverage based on the OECD Five-Step Framework and the requirements of the London Metal Exchange (LME) responsible sourcing policy and the "Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains", and actively require subsidiaries producing "Zijin" brand copper cathode and zinc bullion raw materials to carry out due diligence investigation.

With smelting plants at the centre, we on the one hand require upstream mines to carry out stewardship management and to fulfil their social responsibility, in particular the building of a comprehensive ESG system by all our own mines. On the other hand, we cooperate with downstream parties to carry out due diligence and provide due diligence and stewardship information, together building a responsible mineral supply chain.

We respect the human rights of ASM, encouraging formalisation of ASM and offering their access to legitimate markets, on the premise that they comply with the relevant legal frameworks and are committed to addressing environmental, health, human rights and safety issues related to ASM activities and they are sincere in formalisation (For details on ASM policies and performance, please refer to "Human Rights".)

Future Plans

1. We are expecting to complete the responsible supply chain system development and mock audit by the end of June 2023, and ensure that the system passes the audit and is reported to the LME by the end of December 2023.
2. Continue to focus on updates of international responsible supply chain requirements and best practices.

Product Responsibility

Product Management

Staying true to our integrity philosophy of Putting Our Foothold in Gold Products, Achieving Mutual Benefits and Win-Win Situation, we operate legally, abide by covenants, follow international rules and refrain from committing commercial frauds. The Company is committed to providing customers with quality, safe and responsible products and services. We have in place customer service and quality assessment systems, including "Zijin-Brand Product Quality Management Measures" and "Customer Satisfaction Survey Procedures". We use various channels to collect customer feedback on our products and services and have established a customer needs database, forwarding customer needs and suggestions to our production, technology, process, equipment, quality and other departments, so as to formulate product improvement plans and continuously improve our product quality and services. In the event of a serious quality problem, we will immediately analyse the original records, trace the batch of non-conforming products and the customer list and stop production at the same time until the cause of the problem is identified.

By following the "Goal and Assessment Incentive Management Measures", we define the quality goals and which were broken down and assigned to members of the management and relevant departments. We have established the internal control standard for the quality of gold bullion, i.e. the "Quality Inspection Rules for Finished Gold Bullion" to carry out quality inspection and inspect each batch of products accordingly. Products that do not meet these standards are strictly not allowed to leave the factory under any circumstances. This ensures that the quality of the gold bullion leaving our factory is 100% in compliance with the requirements of the "SGEB1- 2019 Gold Ingot of the Shanghai Gold Exchange". The quality and technical parameters of the gold bullion, silver bullion, copper cathode and zinc bullion produced by the Company are in line with or even better than the technical indicators specified in the national standards, including GB/T 4134-2021 (Gold ingots), GB/T 4135-2016 (Silver ingots), GB/T 467-2010 (Copper cathode) and GB/T 470-2008 (Zinc ingots). The "Zijin" brand gold bullion and "Zijin" brand silver bullion have passed the quality certification by the London Bullion Market Association (LBMA). The quality of the "Zijin" brand A-grade copper and "Zijin" brand zinc bullion have obtained official international recognition, and they are registered delivery brands at the London Metal Exchange (LME).

"Zijin" Brand Gold Bullion

During the reporting period, the Company did not have any violations related to the information and labelling of production and service or any violations related to sales and marketing. We also did not have any product recalls or complaints due to safety and health reasons. The qualification rate of mineral products remained above 99.8% for the fourth consecutive year, while customer satisfaction reached 99.6%.

Product Management

Indicator	Unit	2022	2021	2020
Qualified mineral product ratio	%	100	99.90	99.80
Number of products recalled for safety and health reasons	/	0	0	0
Number of complaints lodged due to safety and health reasons	/	0	0	0
Customer satisfaction	%	99.60	99.22	99.29
Wood for packaging products	Tonne	703	699	253
Bags for packaging concentrate products	Tonne	3,818	1,841	2,370

Information Security

We respect the privacy and interests of all stakeholders and strive to protect their privacy and information security of all stakeholders. We have an informationisation working committee responsible for decision-making on major information security matters and guiding our subsidiaries in developing information security systems. The information security officer reports monthly to our senior management on the security of the Company's information privacy. During the reporting period, no customer privacy leak occurred.

We have developed a comprehensive information security system, as well as technical standards and corresponding management measures, to protect the confidentiality, integrity and availability of our information systems, equipment and data. Our information security management covers the following areas:

- Personnel security
- Data centre security
- Information asset security
- Network security
- Software system security
- Client security
- Document, data and storage media security
- Third-party access
- Contractors
- Information security emergency
- Cloud computing security
- Mobile internet security
- IoT security
- Industrial control system security

We follow the "Contingency Plan for Information Security Incidents", which defines the importance levels of various information security incidents such as network interruptions and equipment failures, as well as emergency reporting, handling, and information disclosure procedures. At the same time, we have specified the reporting procedures and time frame for information security emergencies, and included information security performance in the annual performance assessment indicators and linked with the remunerations of relevant personnel.

We annually organised information security and privacy protection-themed events and talks, as well as information security awareness training and assessment. During the reporting period, our coverage rate of information security and privacy protection training and assessment reached 100%.

Technological Innovation

Innovation is a company's core competitiveness. It is about appropriately applying universal scientific principles in objective reality. The best innovation is the one that suits the most. Innovation is a process of constantly reinventing oneself. Technological innovation is our core competitiveness and the "No. 1 driving force" for Zijin Mining's sustainable development. By continuously promoting innovation in technology and management, we gain competitive and cost advantages for the Company, helping it achieve its goal of becoming a Green, High-tech, Leading Global Mining Company.

◎ Policy System for Technological Innovation

Zijin Mining is one of the few multinational mining companies in the world that have system autonomous technology and engineering management capabilities, as well as a comprehensive scientific research system and scientific research institutions. The Company has established a number of high-level R&D platforms and research and design entities, including the only State Key Laboratory in the gold industry of China, the nationally recognised enterprise technology centre, workstation for academician research, workstation for post-doctoral research, and mining and metallurgy research institute, forming a technological innovation system with Zijin's characteristics and a series of independent intellectual property rights and scientific research achievements. We have also established a technology management documentation system, which include the "Management Policy for Science and Technology Work", "Detailed Rules for the Implementation of Science and Technology Awards". In addition, during the reporting period, we revised the "Measures for the Management of Scientific Projects", the "Regulations on the Management of the Postdoctoral Research Workstation" and other policies to further promote the implementation of scientific and technological innovation work.

In order to protect intellectual property rights, the Company revised the "Regulations on Intellectual Property Management" during the reporting period to further set out clear requirements on attribution, management and protection of intellectual property rights. During the reporting period, the Company's headquarters passed the "National Intellectual Property Demonstration Enterprise" review, and our subsidiary, Zijin Zinc, was named "Enterprise with National Intellectual Property Advantages".

To create a favourable atmosphere for technological innovation and foster a culture that encourages innovation, we have incorporated scientific and technological achievements into the job promotion and remuneration assessment system, motivating our technological personnel to continuously innovate and giving them sufficient room for growth and advancement. We will continue to explore a more efficient and scientific project management and research incentive system to motivate our employees to innovate and continuously improve scientific research efficiency.

◎ Technological Innovation Achievements

We are keeping up on promoting our "Five-Stage Life-of-Mine Project Management Procedure by In-House Capabilities". Led by the Company's innovation concept, we push forward technical research and development in geological exploration, mining, ore processing, metallurgy, environmental protection, etc., in an orderly manner while taking actual circumstances into consideration, in order to solve production technical problems and in turn create value for the Company. The Company's new technology projects lean towards critical research fields, including natural caving mining method, high ground pressure, high-cold and high-altitude mining and vegetation restoration, equipment automation and informationalisation, and new energy and advanced materials. During the reporting period, the Company carried out 177 research projects, including 4 new national-level science and technology projects. A total of 15 subsidiaries and the Company headquarters were awarded as "High-tech Enterprises". There were 10 major technological transformation achievements, and the contribution of scientific and technological achievements to production efficiency exceeded RMB268 million.

During the reporting period, the technology for the Company's large-scale natural caving mining method successfully entered the experiment stage. To solve the problem of natural caving mining method, the Company performed on-site tests at Duobaoshan Copper Mine using hydraulic pre-fracturing technology. It has preliminarily completed drilling and fracturing, and is now collating and analysing the relevant test data. The Company has also achieved a number of technological innovations in resource exploration, new energy utilisation, comprehensive recovery and utilisation of low-grade refractory ores and ecological restoration in high-cold regions, which have increased the Company's economic profits and improve sustainability to a significant extent.

We are also actively participating in government technology projects, and the formulation and revision of national and industry standards. At the end of the reporting period, the Company owned 197 patents in total, of which 127 were invention patents. During reporting period, we submitted 44 new patent applications, obtained 29 new patents and involved in the formulation and revision of 23 standards.

Conducting research projects	Patents held	Newly granted patents
177	197	29

Appendices

Zijin Mining 2022 ESG Performance Data

Performance Data - Economic

Indicator	Unit	2022	2021	2020	2019
Business performance					
Revenue	RMB100 million	2,703	2,251	1,715	1,361
Profit before tax	RMB100 million	300	248	108	70
Net profit attributable to owners of the parent	RMB100 million	200	157	65	43
Total assets at the end of the reporting period	RMB100 million	3,060	2,086	1,823	1,238
Production volume					
Mine-produced copper	10,000 tonnes	88	58	45	37
Mine-produced gold	Tonne	56	48	41	41
Mine-produced zinc (lead)	10,000 tonnes	44	43	38	37
Resources					
Copper	10,000 tonnes	7,372	6,277	6,206	5,725
Gold	Tonne	3,117	2,373	2,334	1,887
Zinc (lead)	10,000 tonnes	1,118	962	1,033	856
Lithium carbonate	10,000 tonnes	1,215	763	/	/

Performance Data - Governance

◎ Composition of the Board of Directors

Indicator	Total	Executive directors	Non-executive director	Independent directors	Female directors
Number of Directors	13	6	1	6	2
Percentage	100%	46.2%	7.7%	46.2%	15.4%

◎ Business ethics

Indicator	2022	2021	2020	2019
Business ethics training coverage				
Directors, supervisors and senior management	100%	100%	87.19%	83.29%
Employees	75.50%	64.82%	63.96%	68.00%
Suppliers and contractors	70.90%	62.10%	61.55%	58.24%
Whistleblowing reports				
Total number of whistleblowing reports received	204	154	104	/
-from employees	86	63	28	/
-from suppliers and contractors	63	54	33	/
-from other stakeholders	55	37	43	/

Performance Data - Environment

◎ Environmental protection

Indicator	Unit	2022	2021	2020	2019
Investment in environmental protection	RMB100 million	14.67	14.20	10.92	7.25
-investment in eco-restoration	RMB100 million	4.89	3.35	0.96	0.95
Area of vegetation restored	Million m^2	12.75	7.76	3.33	5.25
Number of trees planted	Million	1.21	1.15	0.41	1.34

◎ Climate change

Indicator	Unit	2022	2021	2020	2019
Total GHG emissions (SCOPE 1+2)	Million tCO_2e	**7.78**	**7.26**	**6.11**	**5.35**
GHG emissions intensity by industrial added value	tCO_2e/RMB10,000	**1.55**	**1.79**	**1.85**	/
-Direct GHG emissions (SCOPE 1)	Million tCO_2e	3.12	2.79	2.54	2.02
-Indirect GHG emissions (SCOPE 2)	Million tCO_2e	4.66	4.47	3.57	3.33
Investment in climate change management	RMB100 million	**5.93**	/	/	/

Notes:
1. Parameters such as lower heating value, mass of carbon per unit of calorific value and carbon oxidation rate are mainly based on the GHG emission calculation methods and reporting guidelines for each industry in the host countries.
2. Indirect GHG emissions are calculated by each company using the location-based carbon dioxide emission factor standard, multiplied by the total purchased electricity consumption, without excluding clean energy from the purchased electricity.
3. Investment in climate change include but are not limited to energy-saving technological upgrades, oil-to-electricity conversions, new energy construction, waste heat recycle, and other projects, which may overlap with environmental protection investments in statistical analysis.
4. GHG emissions by industrial value added refer to the emissions generated by the production of the value-added portion in the industrial process. Industrial value added is calculated based on the income approach (i.e. industrial value added = fixed assets depreciation + payments to employees + net taxes on production + operating profit).

◎ Energy consumption

Indicator		Unit	2022	2021	2020	2019
Direct energy	Paraffin	Tonne	592	1,481	1,833	3,929
	Diesel	Tonne	392,930	345,894	256,856	202,336
	Gasoline	Tonne	1,061	1,502	1,457	1,162
	Coal	Tonne	560,249	636,682	859,536	610,665
	Natural gas	Million cubic metres	1.79	2.25	1.41	3.59
	Other direct energy	TJ	57.16	230.61	425.46	520.57
Indirect energy	Electricity	GWh	8,126.68	6,681.20	5,335.00	4,893.00
	-Non-green power	GWh	5,485.39	6,331.00	5,011.00	4,687.00
	-Hydropower	GWh	2,544.47	347.00	324.00	206.00
	-Solar power	GWh	43.4	3.20	/	/
	-Other renewable energy	GWh	53.42	/	/	/
	Steam	TJ	-935.7	-802.56	-783.41	-907.62
Energy consumption by source (GWh)						
Total energy consumed		**GWh**	**16,294.54**	**15,236.89**	**14,271.21**	**11,377.08**
Total direct energy (non-renewable energy) consumed		**GWh**	**8,419.35**	**8,777.92**	**9,153.24**	**6,735.34**
- Paraffin		GWh	7.09	18.41	22.79	48.84
- Diesel		GWh	4,654.41	4,163.55	3,091.80	2,440.22

Indicator	Unit	2022	2021	2020	2019
Energy consumption by source (GWh)					
- Gasoline	GWh	12.71	18.70	18.14	14.46
- Coal	GWh	3,545.46	4,265.43	5,744.37	4,042.94
- Natural gas	GWh	183.81	247.77	157.95	44.27
- Other direct energy sources	GWh	15.88	64.06	118.19	144.61
Total indirect energy consumed	**GWh**	**7,875.19**	**6,458.25**	**5,117.37**	**4,435.47**
- Electricity	GWh	8,126.68	6,681.20	5,335.00	4,893.00
- Steam	GWh	-251.49	-222.95	-217.63	-252.14
Energy consumption by source (TJ)					
Total energy consumed	**TJ**	**58,655.64**	**54,848.40**	**51,372.24**	**40,954.20**
Total direct energy (non-renewable energy) consumed	**TJ**	**30,307.23**	**31,598.00**	**32,949.02**	**24,245.30**
- Paraffin	TJ	25.51	66.26	82.03	175.83
- Diesel	TJ	16,754.54	14,987.58	11,129.59	8,784.08
- Gasoline	TJ	45.73	67.31	65.28	52.05
- Coal	TJ	12,762.66	15,354.34	20,678.08	14,553.42
- Natural gas	TJ	644.99	891.91	568.57	159.36
- Other direct energy sources	TJ	57.16	230.61	425.46	520.57
Total indirect energy consumed	**TJ**	**28,348.41**	**23,247.83**	**18,421.05**	**15,966.41**
- Electricity	TJ	29,253.70	24,050.39	19,204.46	17,613.39
- Steam	TJ	-935.70	-802.56	-783.41	-907.62
Energy consumption structure					
Energy consumption intensity by industrial added value	MWh/ RMB10,000	3.25	3.75	4.32	/
	MJ/ RMB10,000	11.69	13.50	15.53	/
Ratio of direct energy (fossil fuel) consumed	%	51.67	57.61	64.14	59.20
Ratio of indirect energy consumed	%	48.33	41.62	35.16	38.99
Ratio of renewable energy consumed	%	16.21	/	/	/

Notes:
1. Other direct energy includes heavy oil, methanol and liquefied petroleum gas.
2. Renewable energy consumption includes purchased renewable energy and the clean energy generated by ourselves. For unidentified electricity sources, we calculate it as non-green electricity or purchased electricity, without excluding renewable energy sources from it.

◎ Clean energy

Indicator	Unit	2022	2021	2020	2019
Installed capacity of clean energy	MW	167.48	117.00	/	/
Clean energy generated	GWh	257.46	113.26	/	/
- Hydropower	GWh	201.43	107.10	/	/
- Solar power	GWh	31.49	6.16	/	/
- Others	GWh	24.54	/	/	/

Note: The clean energy generated refers to the electricity generated by the clean energy power facilities owned by Zijin Mining, rather than the actual clean electricity consumed by Zijin Mining.

◎ Water stewardship

Indicator	Unit	2022	2021	2020	2019
Total water withdrawal[1]	Million tonnes	**72.71**	**60.56**	**50.77**	**45.23**
Water intensity by revenue	Tonne/RMB million	**269.00**	**269.04**	**296.04**	**332.33**
Total water discharge	Million tonnes	**51.52**	**42.29**	**20.82**	**20.56**
Water reuse rate[2]	%	**94.29**	**92.02**	**91.86**	**91.29**
Water withdrawal by water categories					
- Freshwater	Million tonnes	61.96	40.47	35.59	33.97
- Non-freshwater	Million tonnes	10.75	20.09	15.18	11.25
Water withdrawal by water sources					
- Surface water	Million tonnes	65.09	43.11	34.83	31.42
- Ground water	Million tonnes	3.08	8.78	7.71	5.65
- Externally purchased water	Million tonnes	4.54	4.58	3.71	3.22
Water discharge by water categories					
- Freshwater	Million tonnes	46.90	/	/	/
- Non-freshwater	Million tonnes	4.62	/	/	/
Water discharge by sources					
- Surface	Million tonnes	51.48	/	/	/
- Ground	Million tonnes	-	/	/	/
- External institutions	Million tonnes	0.04	/	/	/
Water withdrawal in water stressed areas					
Total water withdrawals in water stressed areas	Million tonnes	10.06	8.81	6.48	7.10
Ratio of total water withdrawals in water stressed areas	%	13.83	14.55	12.77	15.69

Notes:1.Water withdrawal refers to the water collected from various sources and stored for use. Water withdrawal refers to the water collected from various sources and stored for use. Currently, we are systematically reviewing our water balance model and are not able to estimate rainfall accurately, and it is not an important water resource for our business. Therefore, we do not disclose the rainfall this year and this indicator will be disclosed in the future when the review and improvement of our model is completed.
2. Water re-use rate = (Total water consumption - Total water withdrawal)/Total water consumption

◎ Water pollutants

Indicator	Unit	2022	2021	2020	2019
Discharge volume					
COD	Tonne	373.51	524.13	299.82	346.33
Ammonia nitrogen	Tonne	45.92	27.60	3.58	14.43
Total copper	Tonne	1.57	2.26	0.73	0.60
Total zinc	Tonne	0.80	1.27	0.46	0.40
Discharge intensity by revenue					
COD	g/RMB million	1,381.83	2,328.43	1,748.21	2,544.70
Ammonia nitrogen	g/RMB million	169.89	122.61	20.87	106.03
Total copper	g/RMB million	5.81	10.04	4.26	4.41
Total zinc	g/RMB million	2.96	5.64	2.68	2.94

Note: The significant decrease in water pollutant emissions during the reporting period is attributed to several factors, including changes in rainfall and the suspensions of some projects. It is expected that pollutant emissions may still fluctuate in the future.

◎ Acid rock drainage

Indicator	Number	Ratio
Mines with risk of acid rock drainage	7	13.46%
- Mines where acid rock drainage is predicted to occur	/	0.00%
- Mines where acid rock drainage is actively mitigated	3	5.77%
- Mines where acid rock drainage is under treatment or remediation	4	7.69%

◎ Non-hazardous waste

Indicator	Unit	2022	2021	2020	2019
Total non-hazardous waste generated	Million tonnes	**708.35**	**640.50**	**554.60**	**452.18**
- On-site diverted from disposal	Million tonnes	99.24	82.19	66.44	30.32
- Off-site diverted from disposal	Million tonnes	4.95	5.05	5.16	4.47
- On-site directed to disposal	Million tonnes	519.31	444.82	381.22	312.62
- Off-site directed to disposal	Million tonnes	84.85	108.44	101.78	104.77
Non-hazardous waste comprehensive utilisation rate	%	**14.71**	**13.62**	**12.91**	**7.69**
Non-hazardous waste generated intensity by revenue	Tonne/RMB 10,000	**26.21**	**28.45**	**32.34**	**33.22**
Tailings					
Total tailings generated	Million tonnes	**159.94**	**114.34**	**97.38**	**86.03**
Total tailings recycled	Million tonnes	36.95	25.28	20.73	16.46
Recycling rate	%	23.10	22.11	21.29	19.13

◎ Hazardous waste

Indicator	Unit	2022	2021	2020	2019
Total hazardous waste	Tonne	**320,813.40**	**357,214.01**	**279,286.75**	**414,012.78**
- On-site diverted from disposal	Tonne	1,827.42	42,097.84	25.06	24.60
- Off-site diverted from disposal	Tonne	153,484.30	79,617.90	64,747.03	65,294.27
- On-site directed to disposal	Tonne	21,190.37	228,658.34	212,373.35	345,905.39
- Off-site directed to disposal	Tonne	144,311.31	6,839.93	2,141.31	2,788.52
Hazardous waste comprehensive utilisation rate	%	**48.41**	**34.07**	**23.19**	**15.78**
Hazardous waste generated intensity by revenue	Tonne/RMB million	**1.19**	**1.59**	**1.63**	**3.04**

◎ Air emissions

Indicator	Unit	2022	2021	2020	2019
Nitrogen oxides (NO_x)	Tonne	802.22	888.41	768.81	957.17
Sulphur dioxide (SO_2)	Tonne	1,248.70	1,483.64	1,344.86	1,380.71
Particulate matter (PM)	Tonne	616.23	754.30	646.60	643.50
Sulphuric acid mist	Tonne	69.44	76.91	102.12	48.38
Hydrogen chloride	Tonne	1.07	0.22	0.12	0.19
Ammonia	Tonne	0.34	1.00	0.33	0.01
Hydrogen sulphide	Tonne	0.01	0.00	0.01	/
Lead and its compounds	Tonne	1.11	1.28	0.97	1.08
Arsenic and its compounds	Tonne	0.77	0.83	0.76	0.91
Mercury and its compounds	Tonne	0.03	0.10	0.02	0.02
Volatile organic compounds (VOCs)	Tonne	0.84	0.19	0.22	/

Notes: 1. The total amount of air pollutants is estimated based on the pollutant concentrations and exhaust gas flow in the exhaust gas inspection reports.
2. For details of the emission concentrations of various air pollutants of each subsidiary, please refer to the Company's annual report.

◎ Tailings storage facilities

Indicator	2022	2021
Number of tailings storage facilities	60	52
Number of active tailings storage facilities	33	37
Number of tailings storage facilities at risks	0	0

◎ EMS certification and environmental audit

Indicator	2022	2021
ISO14001:2015 certification coverage	97.5%	87.5%
Environmental audit coverage	95.6%	92.5%

Note: ISO14001:2015 certification coverage is the proportion of operational sites that obtained certification as of the end of the reporting period, based on the production and operational sites the Company owned in 2020.

Performance Data - Society

◎ Labour

Indicator	Unit	2022	2021	2020	2019
Number of workforce					
Number of employees	/	48,836	43,876	36,860	36,605
Number of contractors	/	28,222	/	/	/
By gender					
- Male	%	85.08	84.39	83.86	83.88
- Female	%	14.92	15.61	16.14	16.12
By age					
- <30	%	25.38	23.38	17.01	17.48
- 30 ⩽ Y<50	%	59.91	60.93	63.75	60.10
- ⩾ 50	%	14.71	15.69	19.24	19.43
Local employment rate	**%**	**96.29**	**96.04**	**95.25**	**95.11**

◎ Employee turnover

Indicator	Unit	2022	2021	2020	2019
Number of new hires	/	4,960	7,016	255	/
Employee turnover rate	%	8.66	7.57	9.31	7.68
By gender					
- Male	%	8.55	7.25	8.72	7.66
- Female	%	9.33	8.84	12.39	7.74
By age					
<30	%	11.52	10.25	12.42	9.86
30 ⩽ Y<50	%	7.63	5.63	6.83	6.48
⩾ 50	%	7.48	10.68	14.78	10.60
By region					
China	%	9.75	8.24	10.51	9.75
Other countries and regions outside China	%	6.30	6.75	7.84	5.17

Note: The workforce statistics were calculated after aggregating the numbers submitted by each subsidiary. Due to local laws or practices on anti-discrimination, protection of personal privacy, etc., certain subsidiaries are not allowed to collect certain information on their employees, such as age and gender. As a result, there are certain discrepancies between the total number of employees in the calculation of the employee ratio in each category and the actual total number of employees . Our disclosure is based on the ratio in the actual statistics, and the number of such employees who are not counted in the ratio of the Company's employees by gender and age in 2022 is approximately 5,390.

◎ Employee training

Indicator	Training ratio (%)	Average training hours
By gender		
Male	96.72	25.90
Female	96.49	25.00
By job level		
Upper-level employees	100.00	36.74
Mid-level employees	88.72	39.12
Entry-level employees	90.37	24.12

Note: Entry-level employees do not include overseas entry-level employees, employees with no job grade, and employees below Grade 8.

◎ Collective bargaining agreement

Indicator	Unit	2022	2021	2020	2019
Collective bargaining agreement coverage rate	%	82.62	/	/	/
By region					
Percentage of active workforce covered under collective bargaining agreements broken down by local employees	%	84.19	70.33	/	/
Percentage of active workforce covered under collective bargaining agreements broken down by foreign employees	%	42.00	35.33	/	/

◎ Strikes and non-technical delays

Indicator	Unit	2022	2021	2020	2019
Number of non-technical delays	/	4	0	/	/
Duration of non-technical delays	Day	229.53	0	/	/
Number of strikes and lockouts	/	2	4	/	/
Duration of strikes and lockouts	Day	0	3.75	/	/

◎ Production safety

Indicator	Unit	2022	2021	2020	2019
Investment in production safety	RMB100 million	21.23	14.93	8.91	6.75
ISO45001:2018 certification coverage	%	95.00	87.50	/	/
Number of work-related fatalities of our employees	/	1	4	0	0
Number of work-related fatalities of contractors	/	2	4	2	1

Indicator	Unit	2022	2021	2020	2019
Lost days	Day	12,940.00	2,540.75	5,909.50	4,448.25
Lost work hours rate (per million hours worked)	/	494.38	105.62	328.35	251.88
Lost time injury rate (LTIR) (per million hours worked)	/	0.29	0.30	0.33	0.89
Total recordable incident rate (TRIR) (per million hours worked)	/	0.64	0.68	0.69	1.37
Near miss frequency rate (NMFR) (per million hours worked)	/	0.14	0.18	0.07	0.16
Total number of hours worked	Million hours	209.39	192.44	143.98	141.28
Cumulative number of attendances of safety training by current employees	10,000	44.94	33.43	23.97 (excl. contractors)	/
Number of training sessions per current employee	/	5.30	5.00	6.8 (excl. contractors)	/

Notes:1. Unless otherwise indicated, these statistics are from the main mines, smelting and processing companies under actual operational control of the Company, and their contractors.
2. ISO45001:2018 certification coverage is the proportion of operational sites that obtained certification as of the end of the reporting period, based on the production and operational sites the Company owned in 2020.
3. Lost work hours rate = Lost work hours due to work-related injuries ÷ Total number of hours worked x 1,000,000
Lost time injury rate (LTIR) = Number of persons with lost time injury ÷ Total number of hours worked x 1,000,000
Total recordable incident rate (TRIR) = Number of persons with recordable incident injury ÷ Total number of hours worked x 1,000,000
Near miss frequency rate (NMFR) = Number of near misses ÷ Total number of hours worked x 1,000,000

◎ Product management

Indicator	Unit	2022	2021	2020	2019
Qualified mineral production ratio	%	100	99.9	99.8	99.9
Number of products recalled for safety and health reasons	/	0	0	0	0
Number of complaints lodged due to safety and health reasons	/	0	0	0	0
Customer Satisfaction	%	99.60	99.22	99.29	99.28
Wood for packaging products	Tonne	703	699	253	206
Bags for packaging concentrate products	Tonne	3,818	1,841	2,370	2,725

◎ Technological innovation

Indicator	Unit	2022	2021	2020	2019
R&D expenditure	RMB100 million	12.32	7.71	5.83	5.39
New patents	/	29	32	24	27

◎ Suppliers

Indicator	Unit	2022	2021	2020	2019
Total number of suppliers	/	**5,444**	**5,380**	**4,669**	**4,923**
- Suppliers from China	/	4,229	4,480	4,172	4,495
- Suppliers from countries and regions outside China	/	1,215	900	497	428
Number of new suppliers	/	**1,547**	**762**	**917**	**592**
-Number of new suppliers selected by ESG standards	/	1,547	762	917	592
Local procurement rate	%	**65.20**	/	/	/

◎ Community investment

Indicator	Unit	2022	2021	2020	2019
Community investment	RMB million	**454.74**	**423.83**	**231.93**	**195.21**
- Charitable donations	RMB million	250.67	268.24	178.03	166.28
- Development contributions	RMB million	204.07	155.59	53.90	28.93

◎ Economic contribution

Indicator	Unit	2022	2021	2020	2019
Direct economic contribution	RMB100 million	**2,853.94**	**2,359.11**	**1,800.15**	**1,489.2**
-Salaries and benefits paid to employees	RMB100 million	91.08	71.51	39.59	37.65
-Payments to suppliers	RMB100 million	2,511.41	2,106.53	1,635.57	1,338.64
-Community donations	RMB100 million	2.51	2.68	1.66	1.78
-Dividend distributed	RMB100 million	81.15	53.75	35.07	31.4
-Interests paid to creditors	RMB100 million	39.53	24.04	23.09	20.48
-Payments to governments (tax)	RMB100 million	128.26	100.6	65.17	59.25
Total social contribution value	RMB100 million	**509.04**	**394.83**	**214.09**	**169.78**
Social contribution value per share	RMB	**1.94**	**1.53**	**0.84**	**0.73**

Independent Verification Statement

To the management team and stakeholders of Zijin Mining Group Co., Ltd.,

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch (hereinafter referred to as "TÜV SÜD") has been engaged by Zijin Mining Group Co., Ltd. (hereinafter referred to as "Zijin" or "the Company") to perform an independent third-party verification on 2022 Environmental, Social and Governance Report of Zijin Mining Group Co., Ltd. (hereinafter referred to as "the Report"). During this verification, TÜV SÜD's verification team strictly abided by the contract signed with Zijin and provided verification regarding the Report in accordance with the provisions agreed by both parties and within the authorized scope stipulated in the contract.

This Independent Verification Statement is based on the data and information collected by Zijin and provided to TÜV SÜD. The scope of verification is limited to the said information. Zijin shall be held accountable for authenticity and completeness of the provided data and information.

Scope of Verification

Time frame of this verification:

◎ The Report contains the data disclosed by Zijin during the reporting period from January 1st, 2022 to December 31st, 2022, including economic, environmental and social information and data, methods for management of substantial issues, actions/measures and the Company's sustainable development performance during the reporting period.

Physical boundary of this verification:

◎ The on-the-spot verification took place at below listed location, which is,

Headquarter of Zijin (Shanghang) address at 1 Zijin Road, Shanghang County, Longyan City, Fujian Province, the PRC.

The verification data and information range:

◎ The scope of assurance is limited to the data and information of Zijin Mining and the enterprises/projects under its operational control covered by the Report.

The following information and data are beyond the scope of this verification:

◎ Any information and contents beyond the reporting period of this Report; and

◎ The data and information of Zijin's suppliers, partners and other third parties; and

◎ The financial data and information disclosed in this Report that have been audited by an independent third party are not verified again herein.

Limitations

◎ The verification process is conducted in the above scope and place. Sampling and verification are adopted for the data and information in the Report by TÜV SÜD, and only the stakeholders within the organization are interviewed; and

◎ The Company's standpoint, opinions, forward-looking statements and predictive information as well as the historical data and information before January 1st, 2022 are beyond the scope of this verification.

Basis for the Verification

This verification process was conducted by TÜV SÜD's expert team who are highly experienced in economic, social, environmental and other relevant issues and this team drew the conclusions thereof. The verification is accordance with the following standards:

◎ *AA1000AS v3, Type 2 Engagement and Moderate Level of Assurance*

◎ *The Stock Exchange of Hong Kong Limited: the Environmental, Social and Governance Reporting Guide set out in Appendix 27 to the Main Board Listing Rules*

◎ *TÜV SÜD Procedure of Verification on Sustainability Report*

In order to perform adequate verification in accordance with the contract and provide reasonable verification for the conclusions, the verification team conducted the following activities:

◎ Preliminary investigation of the relevant information before the verification;

◎ Confirmation of the presence of the highly substantial issues and performance in the Report;

◎ On-the-spot review of all supporting documents, data and other information provided by Zijin; tracing and verification of key performance information;

◎ Special interview with the representative of Zijin's board of directors; interviews with the employees related to collection, compilation and reporting of the disclosed information; and

◎ Other procedures deemed necessary by the verification team.

Verification Conclusions

According to the verification, we believe that the Report of Zijin Mining meets the requirements of AA1000AS v3. The disclosed information and data of 2022 is authentic and traceable, no systematic or substantial problem has been detected; this Report can be used by the stakeholders of Zijin.
The verification team has drawn the following conclusions on this Report:

Inclusivity	Zijin Mining has fully identified the internal and external stakeholders of the organization, such as the government and regulatory agencies, shareholders and investors, customers, employees, partners and suppliers, and established a communication mechanism for stakeholders. It is used to regularly collect real appeals from stakeholders.
Materiality	Zijin Mining has established a priority determination process for substantive issues, identified sustainable development issues that are highly relevant to the industry and differentiated the priority of the issues, and disclosed the company's concepts and management mechanisms in the process of sustainable development management and operation, The overall content of the report is substantive, and the impact analysis of substantive issues still needs to be improved.
Responsiveness	Focusing on issues of concern to stakeholders, Zijin Mining clearly disclosed its management methods and performance on major issues such as pollutant emissions, occupational health and safety, climate change response, talent development, and social relations. At the same time, established a variety of stakeholder communication mechanisms to fully respond to the demands and expectations of stakeholders.
Impact	Zijin Mining has established a sustainable development management mechanism to contribute to customers, industries, employees and society through its development by integrating ESG concepts into daily operations and business decisions. Through continuous improvement of the company's sustainable development system, a solid foundation is built for sound and sustainable operation.

Recommendations on Continuous Improvement

◎ None.

Statement on Independence and Verification Capability

TÜV SÜD is a trusted partner of choice for safety, security and sustainability solutions. It specialises in testing, certification, auditing and advisory services. Since 1866, TÜV SÜD has remained committed to its purpose of enabling progress by protecting people, the environment and assets from technology-related risks. Today, TÜV SÜD is present in over 1,000 locations worldwide with its headquarters in Munich, Germany. TÜV SÜD has been committed to sustainable development and actively promotes environmental protection related projects. Over the years, TÜV SÜD has been actively expanding its performance in energy management, renewable resources, and electric automobiles, etc., helping its customers meet sustainable development needs.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch is one of TÜV SÜD's global branches and has an expert team whose members have professional background and rich industrial experiences.

TÜV SÜD and Zijin are two entities independent of each other and both TÜV SÜD and Zijin and their branches or stakeholders have no conflict of interest. No member of the verification team has business relationship with the Company. The verification is completely neutral. All the data and information in the Report are provided by Zijin. TÜV SÜD has not been involved in preparation and drafting of the Report, except for the verification itself and issuance of the verification statement.

Signature:
On Behalf of TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch

AA1000
Licensed Report
000-437/V3-ZD63H

TÜV SÜD Sustainability Authorized Signatory Officer
20-March, 2023 Shanghai, China

Note: In case of any inconsistency or discrepancy, the simplified Chinese version of this verification statement shall prevail, while the English translation and the traditional Chinese version are used for reference only.

Indexes

GRI Content Index

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	Disclosure 2-19 Remuneration policies	P15	
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	Disclosure 2-21 Annual total compensation ratio	-	Since some of our subsidiaries comply with privacy policy and their unions require to keep employees' compensation confidential, we cannot estimate the median annual total compensation of the Company
Strategy, policies and practices	Disclosure 2-22 Statement on sustainable development strategy	P03-04	
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	Disclosure 201-4 Financial assistance received from government	-	Please refer to our 2022 Annual Report
Market Presence 2016	Disclosure 3-3 Management of material topics	P55	
	Disclosure 202-1 Ratios of standard entry level wage by gender compared to local minimum wage	-	Since some of our subsidiaries comply with privacy policy and their unions require to keep employees' compensation confidential, we cannot estimate the ratios. However, all subsidiaries are request to provide entry level wage higher than local minimum wage and ensure it is competitive in local labour markets
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GRI Standard	Disclosure	Pages	Explanation
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	Disclosure 205-2 Communication and training about anti-corruption policies and procedures	P20-21	
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	Disclosure 207-4 Country-by-country reporting	-	Please refer to our 2022 Annual Report
Materials 2016	Disclosure 3-3 Management of material topics	P79	
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	Disclosure 301-2 Recycled input materials used	P49-50	
	Disclosure 301-3 Reclaimed products and their packaging materials	-	As an upstream raw material supplier in the industry chain, our products are basic industrial metals and do not involve product recycling
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	Disclosure 302-1 Energy consumption within the organization	P32-34	
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	Disclosure 304-2 Significant impacts of activities, products and services on biodiversity	P44	
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	Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	P44	
Emissions 2016	Disclosure 3-3 Management of material topics	P32	
	Disclosure 305-1 Direct (Scope 1) GHG emissions	P34	
	Disclosure 305-2 Energy indirect (Scope 2) GHG emissions	P34	
	Disclosure 305-3 Other indirect (Scope 3) GHG emissions	-	We plan to conduct the calculation of Scope 3 GHG emissions. However, during the reporting period, there was no complete and reliable statistics for Scope 3 GHG emissions yet.
	Disclosure 305-4 GHG emissions intensity	P34	
	Disclosure 305-5 Reduction of GHG emissions	P34	
	Disclosure 305-6 Emissions of ozone-depleting substances (ODS)	-	Our operation does not generate ODS
	Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides(SOx), and other significant air emissions	P51-52	
Waste 2020	Disclosure 3-3 Management of material topics	P48	
	Disclosure 306-1 Waste generation and significant waste-related impacts	P48	
	Disclosure 306-2 Management of significant waste-related impacts	P48-50	
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GRI Standard	Disclosure	Pages	Explanation
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	Disclosure 401-1 New employee hires and employee turnover	P58	
	Disclosure 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	P58-60	
	Disclosure 401-3 Parental leave	P55,P59	
Labor/Management Relations 2016	Disclosure 3-3 Management of material topics	P23	
	Disclosure 402-1 Minimum notice periods regarding operational changes	P24	
Occupational Health and Safety 2018	Disclosure 3-3 Management of material topics	P61	
	Disclosure 403-1 Occupational health and safety management system	P61-62	
	Disclosure 403-2 Hazard identification, risk assessment, and incident investigation	P62-63	
	Disclosure 403-3 Occupational health services	P64	
	Disclosure 403-4 Worker participation, consultation, and communication on occupational health and safety	P62	
	Disclosure 403-5 Worker training on occupational health and safety	P63	
	Disclosure 403-6 Promotion of worker health	P64	
	Disclosure 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	P64	
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	Disclosure 404-1 Average hours of training per year per employee	P59-60	
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Non-discrimination 2016	Disclosure 3-3 Management of material topics	P24	
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Freedom of Association and Collective Bargaining 2016	Disclosure 3-3 Management of material topics	P23-24	
	Disclosure 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	P23	

GRI Standard	Disclosure	Pages	Explanation
Child Labor 2016	Disclosure 3-3 Management of material topics	P23-24	
	Disclosure 408-1 Operations and suppliers at significant risk for incidents of child labor	P23	
Forced or Compulsory Labor 2016	Disclosure 3-3 Management of material topics	P23-24	
	Disclosure 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	P23	
Security Practices 2016	Disclosure 3-3 Management of material topics	P23-25	
	Disclosure 410-1 Security personnel trained in human rights policies or procedures	P25	
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	Disclosure 411-1 Incidents of violations involving rights of indigenous peoples	P24	
Local Communities 2016	Disclosure 3-3 Management of material topics	P68-76	
	Disclosure 413-1 Operations with local community engagement, impact assessments, and development programs	P68-76	
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Supplier Social Assessment 2016	Disclosure 3-3 Management of material topics	P77	
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Customer Health and Safety 2016	Disclosure 3-3 Management of material topics	P79	
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	Disclosure 417-2 Incidents of non-compliance concerning product and service information and labeling	P79	
	Disclosure 417-3 Incidents of non-compliance concerning marketing communications	P79	
Customer Privacy 2016	Disclosure 3-3 Management of material topics	P79-80	
	Disclosure 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	P79	

HKEX Index

Index	Subject Areas, Aspects, General Disclosures and KPIs	Pages
Aspect A1: Emissions	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Note: Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.	P27 P38 P48 P51
	KPI A1.1 The types of emissions and respective emissions data.	P34 P42 P49 P50 P52
	KPI A1.2 Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P34
	KPI A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P50
	KPI A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P49
	KPI A1.5 Description of emission target(s) set and steps taken to achieve them.	P10 P11 P32-34 P41, P48-P50, P51 P52
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Aspect A2: Use of Resources	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	P32-P34 P38-P40
	KPI A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	P34
	KPI A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P38 P40
	KPI A2.3 Description of energy use efficiency target(s) set and steps taken to achieve them.	P27, P32-P34
	KPI A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	P38-40
	KPI A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	P79

Index	Subject Areas, Aspects, General Disclosures and KPIs	Pages
Aspect A3: The Environment and Natural Resources	General Disclosure Policies on minimising the issuer's significant impacts on the environment and natural resources.	P36 P37
	KPI A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P27-P53
Aspect A4: Climate Change	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P28-P31
	KPI A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	P28-P34
Employment and Labour Practices		
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	KPI B1.1 Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	P55 P56
	KPI B1.2 Employee turnover rate by gender, age group and geographical region.	P58
Aspect B2: Health and Safety	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	P61
	KPI B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P63
	KPI B2.2 Lost days due to work injury.	P63
	KPI B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	P62-P66
Aspect B3: Development and Training	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer.	P59 P60
	KPI B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P60
	KPI B3.2 The average training hours completed per employee by gender and employee category.	P59 P60

Index	Subject Areas, Aspects, General Disclosures and KPIs	Pages
Aspect B4: Labour Standards	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	P23, P24
	KPI B4.1 Description of measures to review employment practices to avoid child and forced labour.	P24
	KPI B4.2 Description of steps taken to eliminate such practices when discovered.	P24
Aspect B5: Supply Chain Management	General Disclosure Policies on managing environmental and social risks of the supply chain.	P77 P78
	KPI B5.1 Number of suppliers by geographical region.	P78
	KPI B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	P77
	KPI B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P77 P78
	KPI B5.4 Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P77 P78
Aspect B6: Product Responsibility	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	P79
	KPI B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P79
	KPI B6.2 Number of products and service related complaints received and how they are dealt with.	P79
	KPI B6.3 Description of practices relating to observing and protecting intellectual property rights.	P80
	KPI B6.4 Description of quality assurance process and recall procedures.	P79
	KPI B6.5 Description of consumer data protection and privacy policies, and how they are implemented and monitored.	P79

Index	Subject Areas, Aspects, General Disclosures and KPIs	Pages
Aspect B7: Anti-corruption	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	P19
	KPI B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P20
	KPI B7.2 Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	P21 P22
	KPI B7.3 Description of anti-corruption training provided to directors and staff.	P20 P21
Aspect B8: Community Investment	General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	P68-P70
	KPI B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P70-P76
	KPI B8.2 Resources contributed (e.g. money or time) to the focus area.	P75

TCFD Index

Disclosure		Pages
Governance	a) Describe the board's oversight of climate-related risks and opportunities.	P15-16
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	P15-16,P27
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	P28-29
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	P30-31
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	P27-29
Risk management	a) Describe the organization's processes for identifying and assessing climate-related risks.	P28
	b) Describe the organization's processes for managing climate-related risks.	P30-31
	c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	P16,P18,P27
Metrics and targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	P28
	b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	P34
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	P26-27

SASB Index

SASB Code	Accounting Metric	Unit of Measure	Data/Pages
EM-MM-110a.1	Gross global Scope 1 emissions	Metric tons (t)CO2e	3,210,000
	Percentage covered under emissions-limiting regulations	Percentage (%)	0
EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	N/A	P26-34
EM-MM-120a.1	Air emissions of the following pollutants:	N/A	-
	(1) CO	Metric tons (t)	0
	(2) NOx (excluding N_2O)	Metric tons (t)	802.22
	(3) SOx	Metric tons (t)	1,248.70
	(4) particulate matter (PM10)	Metric tons (t)	616.23
	(5) mercury (Hg)	Metric tons (t)	0.03
	(6) lead (Pb), and	Metric tons (t)	1.11
	(7) volatile organic compounds (VOCs)	Metric tons (t)	0.84
EM-MM-130a.1	(1) Total energy consumed	Gigajoules (GJ)	58,655,640
	(2) Percentage grid electricity	Percentage (%)	49.60
	(3) Percentage renewable	Percentage (%)	16.21
EM-MM-140a.1	(1) Total fresh water withdrawn	Million cubic meters (m^3)	61.96
	(2) Total fresh water consumed	Million cubic meters (m^3)	15.06
	(3) Percentage of each in regions with High or Extremely High Baseline Water Stress	Percentage (%)	13.83
EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number	1
EM-MM-150a.1	Total weight of tailings waste	Metric tons (t)	159.94
	Percentage recycled	Percentage (%)	23.10
EM-MM-150a.2	Total weight of mineral processing waste	Metric tons (t)	5.55
	Percentage recycled	Percentage (%)	97.62
EM-MM-150a.3	Number of tailings impoundments, broken down by MSHA hazard potential	Number	60 All are at low risk
EM-MM-160a.1	Description of environmental management policies and practices for active sites	N/A	P36-37
EM-MM-160a.2	Percentage of mine sites where acid rock drainage is:	N/A	-
	(1) predicted to occur	Percentage (%)	0
	(2) actively mitigated, and	Percentage (%)	5.77
	(3) under treatment or remediation	Percentage (%)	7.69
EM-MM-160a.3	Percentage of (1) proved and	Percentage (%)	-
	(2) probable reserves in or near sites with protected conservation status or endangered species habitat	Percentage (%)	-
EM-MM-210a.1	Percentage of (1) proved and	Percentage (%)	-
	(2) probable reserves in or near areas of conflict	Percentage (%)	-
EM-MM-210a.2	Percentage of (1) proved and	Percentage (%)	-
	(2) probable reserves in or near indigenous land	Percentage (%)	-
EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	N/A	P23-25,P68-73
EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	N/A	P68
EM-MM-210b.2	Number of non-technical delays	Number	4
	Duration of non-technical delays	Days	229.53
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements broken down by local employees	Percentage (%)	84.19
	Percentage of active workforce covered under collective bargaining agreements broken down by foreign employees	Percentage (%)	42.00
EM-MM-310a.2	Number of strikes and lockouts	Number	2
	Duration of strikes and lockouts	Days	0

SASB Code	Accounting Metric	Unit of Measure	Data/Pages
EM-MM-320a.1	(1) MSHA all-incidence rate	Rate	-
	(2) fatality rate	Rate	0.003
	(3) near miss frequency rate (NMFR)	Rate	0.03
	(4) a. average hours of health, safety, and emergency response training for full-time employees	Hours	30.7
	(4) b. average hours of health, safety, and emergency response training for contract employees	Hours	30.7
EM-MM-510a.1	(1) Description of the management system for prevention of corruption and bribery throughout the value chain	N/A	P19-22
EM-MM-510a.2	(2) Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Metric tons (t)	-
EM-MM-000.A	Production of metal ores	Metric tons (t) Saleable	P07
	Production of finished metal products	Metric tons (t) Saleable	-
EM-MM-000.B	Total number of employees	Number	P85
	Total number of percentage contractors	Percentage (%)	-

Notes:

It adopts SASB's calculation method: fatality rate = fatalities/total number of hours worked*200,000

It adopts SASB's calculation method: near miss frequency rate = near misses/total number of hours worked*200,000

UNGC Index

We support the Ten Principles of the United Nations Global Compact (UNGC) and disclose how we implement these principles in this Report.

Principle	Pages
Human Rights	
Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and	P23-25
Principle 2: make sure that they are not complicit in human rights abuses.	P23-25
Labour	
Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	P24
Principle 4: the elimination of all forms of forced and compulsory labour;	P24
Principle 5: the effective abolition of child labour; and	P24
Principle 6: the elimination of discrimination in respect of employment and occupation.	P55,P56
Environment	
Principle 7: Businesses should support a precautionary approach to environmental challenges;	P26-P34 P35-P52
Principle 8: undertake initiatives to promote greater environmental responsibility; and	P26-P34 P35-P52
Principle 9: encourage the development and diffusion of environmentally friendly technologies.	P32,P33 P48-P50 P51,P52
Anti-Corruption	
Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.	P20,P21

Reader's Feedback Form

Dear Reader,

Thank you for reading this Report. In order to improve the Company's ESG work and enhance the ESG capability and quality, we especially wish to hear your opinions and suggestions. Please take some time to complete an evaluation of this Report to help us improve further. Please answer the below questions in the list below and send your feedback to us:

1. What is your overall evaluation of this Report ?

2. What is your opinion on the quality of information disclosed in this Report?

3. What part(s) of the Report interest(s) you most?

4. What other information do you think should be included in this Report?

5. Do you have any suggestion(s) regarding our sustainable development work and publication of the ESG reports in the future?

Please leave us your personal information if it is convenient

Name/company name/industry:

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Our contact:

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MINING FOR A BETTER SOCIETY

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