

# 2023 Environmental, Social and Governance Report

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

Zijin Mining Group Co., Ltd.\*

(www.zijinmining.com ()

\* For identification purpose only

# CONTENT

# Foreword

A Message from the Chairman02
Message from the Director of the ESG
Management Committee03
2023 Highlights04
About Us05
Thirty Years of Sustainable Development09
Sustainable Development Goals10
Materiality Assessment12

01

14

# Our Governance

Corporate Governance1	5
ESG Risk Management18	8
Business Ethics19	9
Human Rights2	3

Our Planet	29
Environmental Management System (EMS)	
Water	33
Land Use	
Biodiversity Conservation	42
Emissions	44
Tailings Storage Facilities	49

# Our Climate Transition 51

Climate Change	2
----------------	---

# Our People 60

Employee Development	1
Occupational Health and Safety (OHS)6	7

74

# Our Society

Community7	5
Responsible Supply Chain	6
Product Responsibility90	0
Information Security	1
Technological Innovation9	1

Appendices 92

About this Report	93
Zijin Mining 2023 ESG Performance Data	94
ESG Report Independent Verification Statement	100
RGMPs Independent Verification Statement	102
Indexes	104
Reader's Feedback Form	112



- Our ESG report demonstrates Zijin Mining's social responsibility fulfilment and sustainability-related performance in 2023.
- Our other sustainability-related public documents and information, such as our policies, ESG Performance Data, and Climate Change Action Plan, can be found in the "Sustainability" section of the Company's website: https://www.zjky.cn/sustainable/Reports\_and\_Policies.htm.



• For information on Zijin Mining's financial performance, please refer to the Company's Annual Report 2023

# Foreword



# A Message from the Chairman



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

The year 2023 marks the important beginning of the second phase of Zijin Mining's "three-step" strategy for the new decade. Faced with the accelerated evolution of global changes, rising geopolitical risks, and global economic uncertainties, as a major player in the global mining market, the Company has always adhered to the original aspiration and mission of "Providing the Materials that Improve Standards of Living in a Low Carbon Future". In the pursuit of sustained and rapid advancement, Zijin Mining has continually refined its top-level Environmental, Social, and Governance (ESG) framework, culminating in the establishment of a globally advanced ESG system. The Company's ESG key performance and ratings have been continuously improving, and numerous distinctive practices of Zijin have become the best practices in the global industry, demonstrating its commitment to responsible mining and establishing a responsible mining brand image.

ESG has become an important measure of the Company's sustainable development. In 2023, the Company has released the Outline of Three-Year (2023-2025) Plan and Development Goals for 2030 and other landmark documents, with increasing social contributions, continuous ranking among the top ten in major economic indicators globally in the mining industry, and leading positions in China. The Company's sustainable development momentum is strong, with continuous increase in new energy generation and ecological environmental protection investment. Global major ESG ratings, including S&P CSA and Morningstar Sustainalytics, have significantly improved. Refinitiv ® ESG Scores lists first in the global mining industry. In addition, we have deep communication with ISSB and support and disclose information based on its initiatives.

#### The "Dual Carbon" goal is an important part of the

Company's development strategy. We have issued the first Climate Change Action Plan in China's nonferrous metal industry that complies with the global TCFD framework. It clearly states our commitment to peak carbon emissions by 2029 and achieve carbon neutrality by 2050, aiming to contribute to limiting global warming to well below 2°C above pre-industrial levels by the end of this century. We rigorously manage carbon emissions across the entire lifecycle of our mining operations, and are expanding our global investment in clean energy projects such as solar, wind, and hydroelectric power, as well as in the transition to electrification. Carbon emissions are a fundamental consideration in our investments; as a principle, we refrain from engaging in highcarbon emission projects. Our green ecological mining construction adheres to the highest global standards, initiating ecological restoration during the construction and production phases. Online monitoring systems in downstream of mines and smelters are supervised by the government or third-party organisations. We build gardenlike, scenic mining areas and factories globally, strengthen biodiversity conservation and care for our planet, thereby achieving a harmonious relationship between mining activities and environmental stewardship.

#### Zijin Mining adheres to the values of "value creation

and common development". As an enterprise, we see ourselves as a platform that brings together shareholders, employees, local communities in host countries of projects, and collaboration partners into an interconnected and inseparable " community with a shared future for mankind" for a common cause. While achieving continuous growth in production capacity and efficiency, we continue to contribute to the host countries and communities global-wise. The Company's robust social contribution, exemplified by a significant value of RMB56.2 billion in 2023, underscores its unwavering dedication to societal welfare. By fortifying responsible supply chain management and bolstering allied industries, Zijin Mining endeavour to catalyse holistic development within its operational spheres.

Zijin Mining upholds the safety philosophy of "life first, safety foremost." We firmly believe that "the right to life" is the most fundamental human right and are committed to ensuring the lives and health of our global employees and contractors. However, it is deeply regrettable that there were multiple safety accidents involving our construction project contractors in 2023, exposing significant gaps between us and world-class safety management levels. With a heavy heart, we have reflected on these accidents and are determined to reconstruct our safety management system. Through a comprehensive three-year safety enhancement plan and the institutionalisation of a robust safety protocol, Zijin Mining aspires to eliminate work-related fatalities and foster a secure working environment for its workforce and to achieve the goal of "zero fatality". We aim to create a safer and healthier working environment for all employees and contractors and win the battle for safe production.

We establish an inclusive, diverse, and nondiscriminatory human rights environment. Respecting and supporting the dignity, well-being, and human rights of our employees, affected communities, and stakeholders is our steadfast commitment to human rights. We follow international human rights guidelines and principles such as the World Declaration of Human Rights, the United Nations Guiding Principles on Business and Human Rights, and the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work. Zijin strengthens the Board's leadership and management over labour and human rights matters. Through processes such as due diligence and third-party audits, we identify, prevent, and mitigate any adverse impacts on human rights resulting from our operations. Implementing a globally localised employment policy we continue to help employees achieve career skills and development. We sincerely respect every employee regardless of their nationality, culture, race, or gender, reject all forms of slave labour, forced labour, and child labour. With employees from 76 countries and regions, totaling over 55,000 employees and 30,000 contractors, we launched a new round of medium- to long-term equity incentive plans in 2023 to share the Company's development achievements with our global employees.

#### Zijin establishes an internationally compatible corporate governance system. Faced with the increasingly complex external development environment, we integrate international ESG standards with our operational management system to explore the construction of a corporate governance system that not only meets international standards but also has Zijin's

distinctive characteristics. Adherence to the Board's comprehensive leadership in ESG is maintained, with the implementation of executive compensation linked to ESG key performance indicators. Efforts are made to enhance the independence and professionalism of the Board's decision-making, along with increasing the proportion of female directors. To strengthen the management of overseas businesses, we have established an Overseas Management Committee and relocated the international business division to the frontlines of overseas projects, comprehensively implementing international management system reforms. By establishing a Lithium Industry Leading Group, we would like to focus on tracking and researching the lithium market and determining precise strategies for the construction and operation of our lithium projects. Continuously implementing organisational changes and engaging in self-renewal is vital to maintaining our operational effectiveness.

Zijin upholds a high-standard business ethics management model. In 2023, we further established, strengthened, and improved a "five-in-one" supervision and anti-corruption mechanism with Zijin's distinctive characteristics, which covers all areas domestically and internationally, enhancing the relative independence and effectiveness of supervision. We have placed a strong emphasis on enhancing business ethics and anticorruption supervision and management in our overseas projects, enabling the exercise of power in a transparent manner. We have integrated the entire process of production and operation activities into an information platform for management, review, and approval. This has helped establish a transparent, clean, and fair business operating environment. Supervision and inspection have been strengthened in capital-intensive, resourceintensive fields such as finance, construction, supply chain, and overseas projects. Our goal is to promote "fairness, transparency, and integrity", continuously nurturing a culture of integrity and righteousness. We take a firm stance against any form of corruption, striving to create a healthy business environment that is clean and friendly.

With the joint efforts, nothing is impossible; with the wisdom of many, nothing cannot be achieved. Zijin Mining will take the new five-year plan as an opportunity, relying on a broader range of stakeholders, to continue adhering to the master work directive of "improving quality, reducing costs, boosting profitability. "We will adhere to the principles of being proactive, innovative, adaptable, and risk-controlled. We will uphold the concepts of "mining for a better society" and common development, and accelerate the construction of firstclass ESG competitiveness, continuously improve reserves and production of copper, lithium, and other critical mineral resources related to new energy, increase the proportion of renewable energy use, and create more green and low-carbon projects to support global lowcarbon transformation and address climate change. We firmly believe that more people will benefit from Zijin's development, making the world's mining industry a better place with Zijin's efforts!

# A Message from the Director of the ESG Management Committee



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

2023 marked a year for global mining companies to seek opportunities in the face of crisis and to explore new strategies amid changing circumstances. Under the leadership of the Board of Directors and the Strategic and Sustainable Development (ESG) Committee, Zijin Mining remained resolute, faced challenges head-on, and took a proactive role in industry transformation. Through multiple approaches such as consensus building, institutional safeguards, low-carbon transition, green co-development, and technology-based efficiency improvement, we focused on long-term interests, created shared values, and improved development quality from all aspects. As we strike a dynamic balance between benefit growth and social value, we strive to establish ourselves as a responsible multinational mining enterprise, thus making significant contributions to the sustainable development of the mining industry.

The concept of ESG has been deeply integrated into our Company's operations and management, and ESG has become an integral part of our conscious proactive practice for sustainable development. The belief in benefiting society and all stakeholders through sustainable mining practices has been the guiding logic and development path for Zijin Mining's transformation from a small county-level enterprise to an international mining group over the past 30 years. The development journey of Zijin aligns with the principles of ESG. In this new era of global socio-economic development faced with various challenges, ESG has naturally become the inherent force for our continued growth. We have established a comprehensive ESG governance structure that covers all Zijin projects, formed a management system that ensures the top-down implementation of ESG goals and requirements and continuously optimised and adjusted our objectives and measures. We continue to enhance our scientific and standardised governance level, adhere to high standards of corporate ethical behaviour, fully implement the "Basic Management Principles of Zijin Mining", pay equal attention to the Company's short-tomedium-term benefits and continuous improvement of environmental and social benefits related to the Company's long-term development, and integrate labour rights, anti-racial discrimination, anti-sexual harassment, respect for women's rights, indigenous rights and other aspects into our institutional framework. Through training and third-party auditing, we endeavour to protect the rights of our employees and surrounding communities. In the market, trade, construction, and other supply chain businesses, we establish responsible cooperation mechanisms and conduct business responsibly with our suppliers in a manner consistent with business ethics.

# We have made solid efforts to address climate change and further implement low-carbon and green

development. We have enforced our "Climate Change Action Plan", made diligent efforts to "cool down the earth", established and continuously reviewed the carbon footprint throughout the process, precisely implemented control measures, and set reducing greenhouse gas emissions as an important performance indicator for all projects. We have also promoted the implementation of equipment and facility upgrades to improve efficiency and reduce consumption. Research and promotion of highefficiency mining technologies, electrification of operations and transport, utilisation of smelting waste heat and other carbon reduction and emission reduction technologies have been conducted. We are vigorously building wind and solar power plants in mines and factories. Our installed capacity and power generation of clean energy have significantly increased, the proportion of clean energy has effectively increased, and the intensity of greenhouse gas emissions has decreased by 1.46%, meeting the expected target. We have actively researched new energy technologies, the industrialisation process of our selfdeveloped ammonia hydrogen new energy technology has accelerated, and we have innovatively proposed a new scheme for hydrogen production from water electrolysis, empowering low-carbon operations with technology. Actively supporting global transition away from fossil fuels, we provide key metals such as copper and lithium for the development of new energy industries. Over the past year, the Company's mine-produced copper has exceeded one million tonnes annual production milestone, low-carbon and zero-carbon lithium mines have been developed on the Andean Plateau in Argentina and the Qinghai-Tibet Plateau in China. We will accelerate our efforts to become a major global copper-lithium producer, provide adequate supply of low-carbon mineral raw materials for global green development, converge green energy with systematic energy-saving and consumption-reducing actions, and actively help to improve human life.

#### Continuing to improve our ecological mining practices, we contribute more beautiful "Zijin scrolls" to our harmonious Earth. Adhering to the long-standing Zijin model of co-development and co-prosperity in the mining industry, along with environmental harmony, eco-restoration plans are formulated according to local conditions, and biodiversity risk screening is conducted. Throughout the year, about 6.22 million square metres of vegetation have been restored, and about 3.86 million trees and flowers have been planted. Mines in ecologically fragile areas such as highlands, the Gobi, and deserts have undergone a green "metamorphosis", thereby protecting biodiversity with a broader environmental capacity. The green mining practices at Zijinshan Gold and Copper Mine have been included in the recommended cases by UNESCO. We have implemented clean production transformation in mines and smelters, reduced wastes, sewage and emissions at the source, and continuously improved the level of reuse and recycling, with water recycling rates leading the industry. Green, beautiful mines, and factories spread across Zijin's global projects have expanded the influence of Zijin's widely acclaimed green brand. Our solid ecological and environmental protection work received full recognition in ESG ratings, the Company achieved leading global scores in both the environmental sub-items of S&P and Refinitiv ® ESG Scores.

We are determined to comprehensively enhance our safety level and strive to become a benchmark for safe and high-quality development. Employee safety always takes precedence as we have established a robust occupational health and safety management system aligned with international standards. Health risk prevention mechanisms have been set up, intrinsic safety levels constantly elevated, and the foundation for safe production management continually consolidated. Despite our efforts, multiple fatal occupational accidents involving contractors unfortunately occurred in 2023. Deeply mourning for the deceased, we take these incidents as serious warnings. "Zero fatality" is resolutely upheld as our unwavering goal, with safety production considered our inviolable bottom line. By improving our safety system, enhancing safety capabilities, and addressing key areas for improvement, we are firmly committed to achieving a "turnaround" in safety production. Shifting from "focusing on" to "actively implementing", we comprehensively and systematically improve safety management. Rigorous implementation of standardised safety management

systems, strengthening training for all employees to solidify the foundation of active safety, strict control over safety requirements for contractor admission, and increased investment in enhancing the capacity of underground mining self-operating teams and promoting safety through technology are prioritized. Consolidating the foundation of safety and forging Zijin's safety culture, we strive to create a healthy and worry-free working environment for our employees, ensuring that no one is left behind in matters of occupational health and safety.

We continue to uphold the concept of common development, and Zijin's unique ESG practices benefit more people from the Company's development. With the expansion of Zijin's global projects, we are honoured to have more opportunities and capabilities to bring the well-being created by mining development to all corners of the world. We adhere to local hiring practices, with 95.85% of our employees hired from the host country. We are open and inclusive, providing an open learning platform

and fair promotion opportunities for our employees from around the world. Many ambitious young talents and local employees of our projects have quickly been promoted to management positions and have enjoyed generous returns created by value creation. Fostering local sustainable development, we contribute through various initiatives such as establishing schools, providing medical assistance, supporting agriculture, imparting technical skills, and offering business opportunities. In 2023, our global donations totaled RMB297 million. As a strong advocate and practitioner of sustainable development in the mining industry, from the sports development project in Tajikistan and the entrepreneurship support project in Kyrgyzstan to the "Healthy Drinking Water" project in DR Congo and the traditional cultural protection project in Serbia, the "common development" belief held by Zijin Mining is continuously boosting the improvement of people's living standards and the sustainable development goals in various countries.

Zijin Mining is now entering a new stage of development, and the world is also undergoing an era of change. Looking forward to the blueprint of sustainable development and adhering to the purpose of "mining for a better society", we are full of expectations, filled with excitement, and firmly believe that with long-term efforts and perseverance in the practice of ESG, Zijin Mining will certainly accelerate the realisation of the goal of a "green, high-tech, leading global mining company", and thus assume more responsibilities for our beautiful Earth. We also look forward to working shoulder to shoulder with all sectors of society, riding on a wave and contributing to the mining industry for a more beautiful future for humanity !

# **2023 Highlights**

### Governance

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



### Planet

Investment in environmental protection (RMB100 million)



Non-hazardous waste comprehensive utilisation rate (%)



Water re-use rate (%)



### People



## Society



Investment in production safety (RMB100 million)

Lost time injury rate (LTIR)

0.30

2021

0.29

2022

0.25

2023

(per million hours worked)

0.33

2020



Local employment rate

Local procurement rate





# **Climate Transition**

Total GHG emissions (million tCO<sub>2</sub>e)



GHG emissions intensity by industrial added value (tCO<sub>2</sub>e/RMB10,000)



# **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 relatively complete industrial chain and an environmental, social, and governance (ESG) system that meets international standards. The Company ranks among the top ten internationally and leads in China, in terms

Position

of primary metal resources and mineral product outputs. It has a portfolio of world-class mining projects involving copper, gold, zinc (lead), lithium, and other minerals. The Company firmly believes in innovation, particularly technological innovation, as a core strength, and has extensive practical experience in geological exploration, hydrometallurgy, comprehensive recycling and utilisation of low-grade refractory resources, and large-scale development projects. The Company has innovatively created the "fivestage life-of-mine project management procedure by in-house capabilities" mining engineering management model, and established the "state key laboratory of comprehensive utilisation of lowgrade refractory gold ores", forming independent technical and engineering capabilities across all links, and building global competitive strength for green and sustainable development in the mining industry.

### Membership

Adhering to the common development philosophy of "mining for a better society", Zijin Mining is committed to "Providing the Materials that Improve Standards of Living in a Low Carbon Future". The Company is accelerating its overarching strategic goal of constructing a "green, high-tech, leading global mining company", wholly promoting the development of high-quality ecological mines, and striving to make more people benefit from Zijin Mining.

Forbes	NO.284	Forbes' Global 2000 No. 1 of Gold Companies No. 6 of Metal & Mining Companies		中国在非企业社会责任联盟	<b>4614</b> 4444 (1000-1000-1000-1000-1000-1000-1000-100
FORTUNE	NO. <b>373</b>	Fortune 500			
200	NO. <b>51</b>	Fortune China 500	Conta 中田 古色全 ム 二 生体を Circle Romer to Mande Indenty Resentation	中国黄金协会 China Gold Association	● 中国职业安全健康协会
Economic Performance	Total ass		Profit boforo tay		ributable to owners of the parent







Net profit attributable to owners of the parent



# Zijin in the world

Zijin Mining has over 30 large and ultra-large mineral resource development bases in 15 countries overseas and 17 provinces (regions) in China.

The Company owns three world-class copper assets, including the Kamoa Copper Mine in the DR Congo, the Čukaru Peki Copper and Gold Mine and the Bor Copper Mine in Serbia, and the Julong Copper Mine in Tibet, as well as mainstay copper mines such as the Kolwezi Copper Mine in the DR Congo, the Duobaoshan Copper in Heilongjiang, the Zijinshan Gold and Copper Mine in Fujian, and the Ashele Copper in Xinjiang. During the reporting period, the Company newly merged and acquired a batch of promising copper resources, including the Zhunuo Copper Mine in Tibet and the Kharmagtai Copper-Gold Mine in Mongolia.

The Company owns world-class gold assets, such as the Buriticá Gold Mine in Colombia, the Rosebel Gold Mine in Suriname, and Shanxi Zijin. It also owns major gold mines like the Zeravshan Gold Mine in Tajikistan, the Altynken Gold Mine in Kyrgyzstan, Guizhou Zijin, Longnan Zijin. During the reporting period, the Company's Porgera Gold Mine in Papua New Guinea fully resumed production.

The Company owns lithium assets, including the Tres Quebradas Salar Mine in Argentina, the Lakkor Tso Salar Mine in Tibet, and the Xiangyuan Lithium Polymetallic Mine in Daoxian, Hunan. During the reporting period, the Company was invited to lead the development of the world-class Manono Northeast Lithium Project in the DR Congo. The "Two Lakes and Two Mine" lithium resources layout will promote the Company to become one of the most important lithium production companies globally in the future.

As of the end of the reporting period, the Company's measured, indicated, and inferred resources (on equity basis) were: 74.56 million tonnes of copper, 2,998 tonnes of gold, 10.68 million tonnes of zinc (lead), 14,739.29 tonnes of silver, and 13.4659 million tonnes of lithium (lithium carbonate equivalent). During the reporting period, the Company produced 1.01 million tonnes of mine-produced copper, 68 tonnes of mine-produced gold, 470,000 tonnes of mine-produced zinc (lead), and 412 tonnes of mine-produced silver.



# Strategy

### FUNDAMENTAL BUSINESSES

# **AUXILIARY BUSINESSES**



Leverage system engineering, concept of economic mining and professional analysis and decision-making ability, implement mergers and acquisitions of high-quality medium and large mining assets in a timely manner

## SUPPORTING BUSINESSES



### Soft power of Zijin culture

Form the core Zijin culture and philosophy system and the "Jinshan culture" brand, strive to gain high international recognition of the Company's overall strength, professional ability, brand reputation and sustainable development capabilities, and to become a respectable globalised enterprise



#### Mining-related trading and finance

Support trading and logistics businesses which are related to mine development, build a responsible global supply chain and sales team; form a financial platform for capital investment and capital pooling; form a "Zijin series" listing platform through investment in subsidiaries and associates

#### Mine construction and information technology

Establish a self-operated automated and intelligent construction team for mine design, construction and supervision, form a fast-responding and highly integrated mine development team to build mining projects with high quality and speed

# **ESG Awards and Ratings**

ESG Awards





S&P Global S&P Global Sustainability Yearbook Industry Mover

Country	Awarded Subsidiaries	Honours	
	Duobaoshan Copper	National-level Health Enterprise.	
	Guizhou Zijin	Annual Guizhou Province "A-level Environmental Protection Integrity Enterprise"	
_	Zijin Copper	National Model Workers' Home	
China	Jilin Zijin Copper	Provincial Health Enterprise	
	Zijin Non-ferrous	Water-saving Enterprise	
	Luoning Zijin	Annual "Integrity Private Enterprise" of Luoyang	
	FZU Zijin Hydrogen Power	Annual Green Low-carbon Technology Innovation Enterprise	
Serbia	Serbia Zijin Mining	Annual Outstanding Business Achievement Award	
Guyana	AGM	Annual Carbon Footprint Reduction Award	
Kyrgyzstan	Zeravshan	Annual Best Taxpayer	
Tajikistan Altynken		Annual Excellence Award for Safety Production and Environmental Protection	
DR Congo	COMMUS Annual Environmental Excellen		
Colombia	Continental Gold	Promoting the establishment of the "Global Zero Harm Vision" Excellence in Safety Culture Award	

### ESG ratings

REFINITIV REFINITIV ESG Rating A+, first in industry

# S&P Global

**S&P Global Corporate Sustainability Assessment (CSA)** 64, top 6% of industry



**CSI ESG Rating** A, top 12% in the industry



Water -B



**Hang Seng Corporate Sustainability Index Series** Maintained grade A-Included in the Hang Seng (China A) Corporate Sustainability Index for 5



consecutive years

MORNINGSTAR SUSTAINALYTICS

#### Sustainalytics

38.3



MSCI ESG Rating



# **Thirty Years of Sustainable Development**

2023 marks the 30th anniversary of Zijin Mining Group. Zijin Mining has transformed from a county-owned enterprise into a large multinational metal mining group, entering a new stage of development and an important takeoff platform.



# **Sustainable Development Goals**

Zijin Mining adheres to the strategic positioning of "green and low-carbon, common development, sound governance, building comprehensive ESG competitiveness", and has established five key sustainable development directions. The Company has also formulated ESG goals and indicators that are crucial to its long-term business development.

Our Positioning	Strategy	Goal	Performance in 2023	Achievement
Our Governance	Enhancing	Percentage of female directors exceeds that of female employees	Percentage of female directors reached 15.4%	$\bigotimes$
16 17 17 18	Enhancing corporate	Ratio of non-executive directors exceeds 50%	Percentage of independent and non-executive directors reached 53.8%	$\bigotimes$
<b>≚</b> ₩	governance capabilities	The Board takes its ESG management responsibility	The proportion of ESG-related proposals reviewed by the Board is 31.6%, and significant ESG matters require the Board approval	$\bigcirc$
	Establishing a culture of integrity and compliance	Increase coverage of business ethics training	Directors, supervisors, and senior executives: 100% Employees: 87.97%, an increase of 16.5% compared to the previous year Suppliers, contractors: 73.77%, an increase of 4.0% compared to the previous year	$\bigotimes$
	Enhance transparency and	Focus on promoting companies to complete ESG and human rights assurances	Zijin Copper, Bayannur Zijin, Jilin Zijin Copper, Heilongjiang Zijin Copper, Zijin Gold Smelting Company, Longnan Zijin, and Serbia Zijin Mining have completed ESG and human rights certifications	G
	accountability mechanisms	Improve ESG rating	Refinitiv ® ESG Scores upgraded to A+, ranking first in the industry S&P Global Corporate Sustainability Assessment (CSA) increased to 64 points, ranking in the top 6% of the industry	$\bigotimes$
	Respect for human rights	Security personnel human rights training coverage exceeds 90%	The coverage rate of human rights training for security personnel reached 99.65%	$\bigotimes$
		Comprehensive training on general human rights for all employees	Labour and human rights training covering all employees was conducted in 2023	$\bigotimes$
		No major human rights violations	No major human rights violations identified	$\bigotimes$
Our Climate Transition		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 1.53tCO <sub>2</sub> e/ RMB10,000	()
7	Support global	Carbon peak in 2029, carbon neutrality in 2050	Total greenhouse gas (GHG) emissions were 8.41 million tCO <sub>2</sub> e	()
	warming control targets	By 2030, the proportion of renewable energy consumed will exceed 30%	Renewable energy accounted for 21.48%	()
		GHG Scope 3 will be disclosed in 2023	This report provides the initial disclosure of the Scope 3 emissions generated from business travel, amounting to 3,429 tonnes	()
	Promoting the	Increase coverage of clean power devices	The total installed capacity of clean electricity reached 244.05 MW	$\bigotimes$
	development and application of new energy technologies	Expand research and application of hydrogen energy technology	In 2023, FZU Zijin Hydrogen Power's self-developed "Ammonia-Hydrogen" fuel cell power plant is officially completed and delivered for export	()

Our Positioning	Strategy	Goal	Performance in 2023	Achievement
Our Planet		Zero major environmental pollution incidents	No major environmental pollution incidents occurred in 2023	$\bigotimes$
15	Improve sustainable environmental	With 2020 as the baseline year, all production and operation sites will have ISO14001:2015 certification by 2023. All newly acquired production units in the future must complete certification within three years	ISO14001:2015 certification coverage reached 97.5%	$\otimes$
	management system	All mines will meet the green mine assessment standards by 2030	12 national-level "Green Mines", 2 provincial-level "Green Mines"	$\bigcirc$
		All smelting and processing companies will meet the green factory assessment standards by 2030	7 national-level "Green Factories", 6 provincial-level "Green Factories"	$\bigcirc$
		Water re-use rate shall maintain at a level of no less than 90%	Water re-use rate reached 94.80%	$\bigotimes$
	Improve resource recycling efficiency	Water intensity by revenue shall be reduced by 10% by 2030 compared to 2020	Water intensity by revenue was 225.39 tonnes / RMB million	()
		By 2030, non-hazardous waste comprehensive utilisation rate will have increased by 5% compared with 2020	Non-hazardous waste comprehensive utilisation rate reached 14.88%	$\bigcirc$
		100% restoration of recoverable land	Recoverable land was 100% restored by 2023.	$\bigotimes$
	Reduce ecological impact	All mines will formulate and implement Biodiversity Management Plans (BMPs) by 2030	Conducted comprehensive biodiversity risk screening for key operational sites within the group in 2023	()
		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 0.23 tonne/RMB100 million	$\bigcirc$
Our People	Enhance health and safety	Zero fatality	10 contractors and 1 employee fatalities	$\bigotimes$
3		Reduced number of accidents	Lost time injury rate per million hours worked (LTIR) was 0.25, and total recordable incident rate per million hours worked (TRIR) was 0.91	$\bigotimes$
10 mm		With 2020 as the baseline year, all production and operation sites will have ISO45001:2018 certification by 2023	ISO45001:2018 certification coverage reached 97.5%	$\otimes$
		100% safety training coverage for employees and contractors	Safety training coverage of 100% for employees and contractors	$\bigotimes$
Our Society	Promote community	By 2023, the local procurement rate in the host countries will reach 70%	Local procurement rate in the host countries was 80.33%	$\bigotimes$
4 mile 8 mileta	prosperity	Local employment rate remains above 95%	Local employment rate was 95.85%	$\bigotimes$
U m	Respect and communication	Community investment of no less than 1% of the Company's fiscal-year net profit	Community investment reached RMB827 million, accounting for 2.64% of the Company's fiscal year net profit	$\bigotimes$

# **Materiality Assessment**

## **Stakeholder Engagement**

Respecting the demands of stakeholders, we adhere to the principles of integrity, interaction, equality, and transparency. Constantly refining stakeholder participation mechanisms and communication methods allows us to better understand stakeholders' expects. This aids in defining the Company's ESG strategy and material ESG issues, enabling stakeholders to effectively participate in the Company's ESG governance. During the reporting period, we, in accordance with stakeholder communicationrelated international standards and guidelines such as GRI Standards 2021 version and AA1000 Stakeholder Engagement Standard (AA1000SES), regularly record, measure, and review our communication with stakeholders. Based on stakeholder feedback, we promptly improve communication mechanisms and continually enhance the efficacy and timeliness of our communication with all 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	<ul> <li>Labour rights</li> <li>Remuneration and benefits</li> <li>OHS</li> <li>Equal rights and development</li> </ul>	<ul> <li>Steady operation</li> <li>Financial performance</li> <li>Sustainable development</li> <li>Good governance</li> <li>Information transparency</li> </ul>	<ul><li>OHS</li><li>Business ethics</li><li>Openness and transparency</li></ul>	<ul> <li>Compliance with laws and regulations</li> <li>Paying tax according to law</li> <li>Boosting economic development</li> <li>Localised employment</li> </ul>	<ul> <li>Human rights protection</li> <li>Community development</li> <li>Climate change</li> <li>Water resources management</li> <li>Biodiversity</li> <li>Emissions management</li> </ul>	<ul> <li>Addressing climate change</li> <li>Business ethics</li> <li>Openness and transparency</li> <li>Water resources management</li> <li>Human rights protection</li> <li>Biodiversity</li> </ul>
Way of communication	<ul> <li>Meeting of Representatives of workers and staff</li> <li>Conference and training</li> <li>Bulletin board, the Company's intranet</li> </ul>	<ul> <li>Annual general meeting</li> <li>Performance announcement conference</li> <li>Information disclosure</li> <li>Investor's communication platform</li> </ul>	Contractor trainings     Supplier's conferences	<ul> <li>Stock exchange meetings</li> <li>Government meetings</li> <li>Information disclosure platform</li> <li>Government visits</li> </ul>	<ul> <li>Community engagement</li> <li>Mine open day</li> <li>Community service center</li> <li>Mining area project briefing</li> <li>Project community announcement</li> <li>Media interview</li> </ul>	<ul> <li>ESG reports</li> <li>The Company's official website</li> <li>Industry conference</li> </ul>
Response and performance	Implement employee stock ownership plan	<ul> <li>2 general meetings of shareholders and 5 large-scale offline investor exchange activities</li> <li>52 ESG-themed special exchange sessions with investors and shareholders</li> </ul>	<ul> <li>1,523 new suppliers were screened using ESG criteria</li> </ul>	<ul> <li>Participated in discussions on the International Financial Reporting Standards for sustainability disclosure (IFRS S1 &amp; S2)</li> <li>4 smelters established responsible supply chain systems and passed third- party certification to meet LME regulatory requirements</li> </ul>	• Each project promoted community meetings, community open days, government and media visits, and other activities, holding a total of 816 community meetings	Completed the World Gold Council's RGMPs assurance

# **Materiality Analysis**

During the reporting period, we conducted a material issue analysis, referring to GRI's advice on dual-materiality analysis of significant issues, combined with the unique characteristics of our company's business, to identify the most important sustainable development problems faced by the Company. To ensure the continuity and readability of this report, we simultaneously referred to the materiality of various important issues in past reports, converting the results of previous years into a certain coefficient to adjust this year's analysis results. Eventually, we identified 11 high-priority issues, which defined the reporting boundary of this report, and passed the Board's review.

Compared to 2022, the material issues for this year have largely remained consistent. However, compared to last year, we've put more emphasis on the interests of the community. From the "Community relations" issue, we've delineated two material issues of special concern to the community: "Local employment" and "Community health and safety". Additionally, in response to the high risk situation in safety production, we itemized it separately into a highly-material issue - "Occupational safety", for special management. From the results of the material issue analysis, the high-material issues of concern for stakeholders and us have largely remained to last year. However, noticeably, we found that starting in 2023 the stakeholders' attention to responsible supply chains, and "Responsible supply chain" has for the first time become one of our highly material issues.

#### Process to Identify this Year's Report Topics

<ol> <li>Screening the Topics</li> </ol>	24 highly-relevant topics were identified based on international initiatives and standards, investment and rating agencies, and corporate development goals			
2 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			
3 Identifying the Stakeholders	According to business characteristics and operational conditions, 11 categories of stakeholders were identified			
4 Questionnaire	Through online research and field study, about 1,000 questionnaires were distributed in subsidiaries, of which 727 questionnaires were received, covering 8 countries/regions in 4 continents worldwide			
<b>S</b> 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, 11 high- materiality topics were identified, which were also the focus of the corporate risk management			
6 Determining the Reporting Boundaries	Based on the identified important topics, the key contents to be reported in this Report were determined			





# **Corporate Governance**

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.

The Board of Directors, equipped with a sophisticated decision-making mechanism, is charged with exercising operational decision-making authority. Annually, the Board reviews progress and sets goals for the Company in the areas of environment, society, and governance at the end of the year. This information is then reported to the entire company at the annual work meeting held at the beginning of the next year, and subsequent tasks and objectives for the ESG work over the next year are arranged based on the progress. During the reporting period, the Board deliberated on 253 topics or issues, 80 of which were related to ESG. The Company has conducted two specialised training sessions on climate change and ESG development trends for the Board of Directors, further enhancing the Board's understanding and capability in terms of the Company's ESG strategic planning.

### Introduction to the Committees Under the Board of Directors

#### Strategic and Sustainable Development (ESG) Committee

The Committee is composed of nine directors, including five executive directors, one non-executive director, and three independent directors. The Committee's main responsibilities are to analyse the global economy and industry conditions, study the Company's development strategy, and offer opinions and suggestions on the Company's medium- and long-term development strategy, external public policies, sustainable development, and environmental, social, and governance policies. Meanwhile, the Committee capitalises on the diversified backgrounds and ESG knowledge of its members, actively assisting the Board in auditing and controlling major ESG risks of the Company, and supporting other committees in integrating ESG standards and principles into the Company's overseas investment strategy, internal control and supervision system, and incentive compensation plan. At the beginning of the reporting period, the Strategic and Sustainable Development (ESG) Committee studied and revised the Company's future three-year and 2030 goal outlines, developed the second phase plan of deepening reform, the "Dual Carbon" action path, and upgraded the core concept system of the corporate culture, laying a solid foundation for the Company's continued development. The committee has established a "Dual Carbon" Management Leadership Team, which is in charge of coordinating the Company's "Dual Carbon" management work, reviewing the "Dual Carbon" management of upstream enterprises in the industrial chain, periodically reviewing and evaluating the Company's "Dual Carbon" related risks and opportunities, in order to address climate change and comply with energy transitions.

#### **Execution and Investment Committee**

#### Audit and Internal Control Committee

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, within the Board of Directors' authorisation, the Committee enhanced the research and investment in areas like new energy and new material mineral resources, environmental protection, safety production, and employee welfare. They reviewed and approved projects such as "The ultra-low emission modification project for the 2x260t/h circulating fluidised bed boiler at Bayannur Zijin's own power plant," " the Construction the first phase of the Heilongjiang Duobaoshan 200MW Wind-Solar Project invested by Zijin Longking," and "Revision of "Environmental Ecological Assessment Management System," "Ecological Environment Protection Responsibility System", among others. These projects continuously drive energy transformation and promote the Company's achievement of "Dual Carbon" goals.

The Committee is responsible for the communication, supervision, and verification of the Company's internal and external auditing, as well as its internal control and risk management systems. During the reporting period, the Audit and Internal Control Committee diligently audited the Company's annual report, interim report, and quarterly report, provided auditing opinions, and further submitted them to the Board of Directors for review. To enhance the Committee's function, during the reporting period, the Board also revised the "Implementation Rules of the Audit and Internal Control Committee of the Board of Directors".

#### **Nomination and Remuneration Committee**

The 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 passed the" Employee Stock Ownership Scheme for 2023 ", " Share Option Incentive Scheme for 2023 ", and adjusted the allowance for the eighth term of independent directors, non-executive directors, and external supervisors.

#### **Roles and Responsibilities of the Board Members**

	Туре	Gender	Strategic and Sustainable Development (ESG) Committee	Execution and Investment Committee	Audit and Internal Control Committee	Nomination and Remuneration Committee
Chen Jinghe	Exeutive director	М	$\bigotimes$	$\odot$		$\bigotimes$
Zou Laichang	Exeutive director	М	$\bigotimes$	$\bigotimes$		
Lin Hongfu	Exeutive director	М	$\bigotimes$	$\bigotimes$		
Lin Hongying	Exeutive director	F		$\bigotimes$		
Xie Xionghui	Exeutive director	М	$\bigotimes$	$\bigotimes$		
Wu Jianhui	Exeutive director	М	$\bigotimes$	$\bigotimes$		
Li Jian	Non-executive director	М	$\bigotimes$			$\bigotimes$
He Fulong	Independent director	М	$\bigotimes$		$\bigotimes$	$\odot$
Mao Jingwen	Independent director	М	$\bigotimes$			
Li Changqing	Independent director	М	•••••••••••••••••••••••••••••••••••••••		$\odot$	
Suen Man Tak	Independent director	М			$\bigotimes$	$\bigotimes$
Bo Shao Chuan	Independent director	М	$\bigotimes$		$\bigotimes$	$\bigotimes$
Wu Xiaomin	Independent director	F			$\bigotimes$	

Chief officer

### Independence

The Company's independent directors contribute their professional expertise at shareholder meetings, board meetings, and specialised committee meetings to offer opinions on major issues such as company strategy, standardised operations, business management, and internal risk control. This forms in checks and balances within the Board and enhances the scientific and professional nature of the Board decisions. The Board consists of six independent directors and one non-executive director, making up approximately 54% of all director seats. The Audit and Internal Control Committee and the Nomination and Remuneration Committee, two of the four specialised committees under the Board, are both chaired by independent directors. During the reporting period, the Company revised the "Rules on Work for Independent Directors", clarifying role positioning, optimising working methods, strengthening appointment management, improving election systems, enhancing job performance guarantee, setting strict supervision and management, perfecting the constraint mechanism, and improving the supervision system.

### Remuneration

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. In doing so, the Company further adjusted the remuneration scheme for executive directors and senior managers. In the assessment scheme, ESG indicators account for no less than 20% of the annual salary incentive review, including key indicator settings and corresponding weights for environment, safety, social, governance, major ESG incidents, and ESG ratings. Climate change, environmental pollution, and safe production, which are pivotal aspects of the Company's ESG strategy, have relatively higher weights. The indicators fluctuate during 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. There are two female directors in the Company's Board of Directors, accounting for 15.4%, including one executive director and one independent director. There is one female supervisor, who is an external supervisor, accounting for 20%. The Company's existing directors and supervisors have rich 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 Governance System**

Under the leadership of the Board, the Company has formed a top-down ESG governance system. The ESG Management Committee is responsible for promoting and implementing ESG strategies formulated by the Board and enhancing the Company's ESG performance. Led by the Company's President, the Committee oversees ESG topics such as safety and environmental protection, business ethics, community relations, supply chain, and human capital development, demonstrating a high level of professionalism and diversity.

The Company's ESG Office is led by executives in charge of sustainable development and is responsible for coordinating ESG management work among various relevant business departments and subsidiaries. It implements the Company's sustainable development strategy and forms a network of ESG coordination management with the ESG commissioners of the subsidiaries. The specialised departments at the headquarters and those in the subsidiaries have formed their own professional ESG management networks. Relying on the working group network, we effectively decompose ESG strategic goals and quickly deliver policy requirements, forming a dynamic and effective risk prevention and communication mechanism, and grounding good ESG practices.



Zijin at the World Gold Forum



# **ESG Risk Management**

We recognise that, as society evolves, stakeholders around the world are increasingly aware of the importance of participating in corporate governance, demanding that corporations take on more responsibilities for their impact on communities and the environment, far beyond their legal regulatory obligations. Such a trend will intensify, adding ESG risks sourced from stakeholder attention to the mining industry, while also bringing opportunities.

The Company, based on the COSO-ERM framework and ISO31000 standard, has integrated risk management into its global strategy and operational management systems, formulated the "Risk Management Policy" and "Risk Management Operational Guidelines", established risk response mechanisms, and based on risk assessments, identified key risk areas and risk response strategies to ensure the safety of company assets, funds, employees, safety and the environment, values and reputation, etc., in order to safeguard the long-term value realisation of the Company and its affiliates.

The Board and Strategic and Sustainable Development (ESG) Committee and Audit and Internal Control Committee make decisions on significant matters, major risks, and crisis management of the Company. The management is responsible for establishing the risk management system, and the Supervisory Board is responsible for supervising the adequacy and effectiveness of risk management, forming a relatively independent and effective risk management system.

Our ESG risk management spans the entire lifecycle of projects. We start addressing ESG risks from the due diligence stage before project investment, incorporating them into investment decision considerations. We will organise experts in finance, law, safety, environmental protection, community, and other aspects, as well as external research institutions, professionals and consultants to conduct comprehensive research on the



project, utilise risk rating and assessment tools to conduct detailed and comprehensive evaluations on mining, ore selection, mine construction, economy, safety, environment, law, finance, taxes, community, etc., to fulfill responsible investment principles and acquire ESG risk controllable projects. We also believe that these projects can be effectively improved by our subsequent investments and management, and we will monitor ESG risks, develop management plans and invest appropriate funds to support ESG work from the design, construction, operation to the closure of the mine stage. During the reporting period, the ESG risks of our newly invested assets in China, DR Congo, and other places are overall controllable.

A deep understanding exists regarding the inherent connection between ESG accidents and the efficacy of ESG risk management. Identifying the causes of accidents and future risk management methods remains a focal point for all stakeholders. During the reporting period, we established the "ESG Management System" and tracked international negative public opinion. Each subsidiary investigates, evaluates, and responds to key negative public opinions, proposes public opinion response plans and improves internal management plans. The group headquarters supervises the public opinion management and risk control of each subsidiary based on the system and directly relays complaints and stakeholder concerns received by the headquarters to the subsidiaries to help them better understand stakeholder demands and manage risks well.

At present, our main concerns are core ESG risks as detailed below. The associated mitigation measures, main actions, and monitoring performance have also been described in this report.



Geopolitical

Cultural Conflict

Community Relations

# **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 constantly aim to cultivate an equitable, transparent, and trustworthy working and business environment. Emphasis is placed on fostering a corporate culture characterised by probity and rectitude, with continuous efforts dedicated to this endeavour. The Company staunchly opposes any form of corrupt practices that may jeopardise its integrity and reputation.

### Governance

### **O Governance Mechanisms**

The Board and the Strategic and Sustainable Development (ESG) Committee are responsible to oversee the overall coordination of business ethics and anti-corruption work, clearly defining the strategic direction and objectives of business ethics management. Internal oversight constructs a dual management system that combines business regulation with specialised supervision. The business departments are responsible for the primary duties of business ethics management, while the supervision departments play a role in further oversight.

The supervisory departments internally established a "five-in-one" business ethics management system that includes the Supervisory Committee, Commission for Discipline Inspection, supervision, audit, and internal control. A Supervision and Audit Office is set up at the Company's headquarters as a dedicated department of the business ethics management system to maintain the independence of the internal oversight system. We have established internal supervision and audit departments at all major production and operation sites, with dedicated personnel responsible for compliance supervision, managed vertically by the headquarters' Supervision and Audit Office, to achieve full coverage of supervision.



#### **Our Policy**

Supervision

Zijin Mining's "Corporate Code of Conduct", "Policy Statement on Business Ethics Management", and "Policy Statement on Whistleblowing Management" articulate the Company's stance on business ethics explicitly. We require all Company employees as well as collaborating suppliers and contractors to adhere to our business ethics policies. Additionally, documents such as the "Rules on Internal Supervision", "Several Provisions on Integrity in Practice", "Measures for the Management of Whistleblowing", and "Regulations on Internal Audit Management" are also crucial institutional supports for the advancement of our business ethics management.

### O Decision Implementation

Our business ethics management adheres to the decision-making and execution procedures of pre-emptive prevention, in-process review, and post-event optimisation, in order to achieve the goal of minimising business ethics risks to the greatest extent possible.



We continuously track and monitor the improvement until the negative impact is completely eliminated or minimised to the lowest possible level.

Zijin Mining's Business Ethics Management Mechanism

## **Risk Management**

In our international operations, laws from different jurisdictions may pose diverse compliance requirements for our business, and actions suspected of violating ethics or law may pose significant risks to our business, leading to fines or reputational damage. In the Company's operations, there are risks of commercial bribery, embezzlement of company assets, overreporting of project quantities, procurement fraud, and false travel expense claims. These behaviours can increase operational management costs, erode the Company's culture of integrity, and lead to disorder and confusion in management activities.

We adhere to the "<u>United Nations Convention</u> against Corruption" and the Company's "Risk Management System", and make anti-corruption one of the core contents of risk identification. For identified integrity risks, we prevent them by periodically updating the risk inventory to ensure the accuracy and completeness of risk identification. To prevent the appropriation of company assets, we adopt strict procedures for inventory in-and-out management and perform regular or irregular investigations. In response to procurement fraud, we have set strict supplier admission requirements and prohibit the entry of suppliers involved on the negative list. In addition, we regularly carry out anti-corruption assessments and propose improvement measures to continuously nurture a risk management culture.

We conduct anti-corruption reviews on new construction projects and key projects at least once a year and on other projects at least every two years, adjusting plans according to the level of risk and operational circumstances. Annually, based on the contents of our business ethics and anti-corruption policies, we conduct inspections, audits, internal controls, and special checks into our subsidiaries and continuously optimise in response to the issues discovered during reviews.



## Strategy and Management Approach

#### **O** Anti-Corruption Policy Awareness

Zijin Mining requires all projects, directors, employees, suppliers, and contractors to comply with our business ethics policies and standards. Through various forms of training and publicity, we foster a clear and incorruptible corporate culture, ensuring that everyone understands and aligns with our integrity culture, and together we create a harmonious and corruption-free business environment.

#### Integrity Training

We regularly identify and train staff in high-risk corruption positions, including routine integrity training for directors, supervisors, and senior management personnel; pre-employment integrity education for new staff; and on-site education for personnel in sensitive positions, such as logistics, finance, and engineering.

#### Integrity Reminders

We implement reminders about integrity upon taking office; during the reporting period, we organised over 70 newly appointed heads of departments and above to sign the "Commitment to Integrity in Employment". We published analysis of 12 typical cases of external corruption in the Company's "Case of the Month" column to serve as a warning; on International Anti-Corruption Day, we organised employees to participate in anti-corruption publicity creation, collected 54 anti-corruption micro-videos and cultivated an atmosphere of advocating integrity among the staff.

### **Integrity Cooperation**

All contracts signed by us and our subsidiaries, suppliers, and contractors contain integrity clauses, and violation of these clauses will result in blacklisting; at the 2023 Anti-Corruption Work Meeting, we signed the "Integrity Cooperation Agreement" with representatives of four collaboration firms to build a clean and friendly cooperation relationship; on a regular basis, we organise suppliers, contractors, and others to hold "Anti-Bribery" symposiums and jointly study anti-corruption policies and documents, such as the "Whistleblowing Management Policy Statement" and the "Policy Statement on Business Ethics Management".

#### Business Ethics and Anti-corruption Policies and Procedures Acknowledgment Coverage



#### Zijin Mining's Business Ethics Training and Anti-Corruption Policy Training Coverage Rate

Indicator	2023	2022	2021	2020	2019
Directors, Supervisors and senior management	100%	100%	100%	87.19%	83.29%
Employees	87.97%	75.50%	64.82%	63.96%	68.00%
Suppliers, contractors	73.77%	70.90%	62.10%	61.55%	58.24%

#### O Anti-Corruption and Compliance Management

Zijin Mining updates its anti-corruption review plan at least annually for new construction and key projects, and at least biennially for other projects. We also adjust the plan in real-time according to risk levels and industry dynamics. Annually, based on this anticorruption review plan, we conduct inspections, audits, internal controls, and special inquiries across all subsidiaries. The inspections cover areas prone to corruption, such as compliance with laws, financial management, procurement, sales, and engineering construction, and we continuously improve upon issues identified in the reviews.

To protect the interests of all stakeholders and uphold a fair and transparent business environment, we explicitly prohibit all employees from soliciting, accepting, or indirectly receiving gifts, property, securities, or other benefits from suppliers, contractors, potential partners, or individuals related to the exercise of their official duties. We also forbid acceptance of hospitality or participation in travel, fitness, or entertainment activities that may affect the impartial exercise of official duties.

During the reporting period, the Company planned

to complete 33 inspection, audit, internal control, and various special inquiry projects, and all 33 were completed, achieving a 100% completion rate. Inspections focused on employees' integrity in employment, audits evaluated the scientific and effective management of business operations, and internal control emphasised the assessment of internal control effectiveness. Moreover, our supervisory bodies assigned to subsidiaries conducted anti-corruption risk assessments at their operating locations. During this period, the headquarters' Supervision and Audit Office guided and urged all key enterprises with medium to high corruption risk to carry out 372 internal control self-examinations, resulting in 3,136 corrective actions, with 2,866 items resolved, yielding a closure rate of 91.4%. This initiative drove subsidiaries to continuously refine and strengthen their internal self-inspection and evaluation mechanisms.

Throughout the reporting period, 64 employees were subject to legal or disciplinary action due to corruption, and there were 16 instances where contracts with business partners were terminated due to corruption-related violations.



### ◎ Grievance and Whistleblowing Mechanism

Whistleblowing is helpful for us to discover and address issues and to improve our business practices. Zijin Mining encourages all stakeholders to speak out and report any cases that may violate our business ethics management principles. Ensuring that all stakeholders are informed and have channels for providing feedback, we utilise offline public notices, announcements, and disclosures across various online platforms.

We provide stakeholders with a sound complaint and whistleblowing mechanism, continuously expanding the channels for complaints and whistleblowing, and regularly assess their effectiveness to ensure convenience for stakeholder appeals and timely responses to their concerns. This system is maintained and managed by the Company's Supervision and Audit Office, with dedicated personnel responsible for receiving complaints and whistleblowing information. We strictly handle all reports in accordance with legal and institutional requirements, verify the information, and report verified findings to the management. After appropriate managerial approval procedures, actions ranging from conducting conversations to disciplinary measures are taken against violations, up to and including referral to judicial authorities for processing.

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



### **O** Whistle-blower protection

Zijin Mining has a zero-tolerance policy for any form of retaliation against whistleblowers. We encourage all stakeholders to report incidents they deem suspicious or inappropriate. In order to gain whistleblowers' trust and encourage their willingness to report, we adopt multiple protective measures to safeguard the whistleblowers' privacy and strictly control the dissemination of whistleblowing information:

Assigned personnel handle complaints and reports, strictly control the whistleblowing information security, and ensure recusal of parties with a vested interest.

No form of punishment, disciplinary action, or retaliatory measures against whistleblowers is permitted. We are committed to taking any threats or acts of retaliation against whistleblowers extremely seriously. Depending on the circumstances, we will respond with disciplinary action and may refer the matter to judicial authorities for legal accountability.



#### Zijin Mining's Grievance and Whistleblowing Process

During the reporting period, we received a total of 243 whistleblowing reports alleging violations of the "<u>Policy</u> <u>Statement on Business Ethics Management</u>", Of these, 227 have been resolved, resulting in a resolution rate of 93.41%. The sources and types of whistleblowing reports we received are as follows:



### **Future Plans**

effectiveness.

2



# **Human Rights**

Everyone is entitled to basic human rights regardless of skin colour, race, gender, language, religion, nationality, or social background. Zijin Mining advocates for a Code of Conduct based on "integrity, diligence, collaboration, and harmony", respects the human rights of employees, surrounding community members of projects, and partners. The Company adopts a zero-tolerance stance towards any form of discrimination, harassment, bullying, or retaliatory acts in the workplace, treats all employees and contractor staff equally, and strives to create an enjoyable and dignified working atmosphere for employees and their associates on Zijin's platforms. We are committed to promoting respect for human rights through our business operations among communities, host country governments, partners, contractors, and suppliers, and we endeavour to ensure that every link in our value chain adheres to internationally recognised human rights standards.

### Governance

The Board is responsible for human rights risk management, while the ESG Management Committee oversees the execution of human rights risk management efforts. All subsidiaries have established work bodies that are vertically managed by the ESG Management Committee to supervise and manage compliance with human rights standards and the Company's human rights policies and to carry out their human rights risk management tasks.

Zijin Mining adheres to human rights-related principles and purposes as set forth in standards such as the "<u>Universal Declaration of Human</u> Rights", the "<u>United Nations Guiding Principles on Business and Human</u> Rights" (UNGP), the International Labour Organisation's "<u>Declaration on</u> <u>Fundamental Principles and Rights at Work</u>", the World Gold Council's "<u>Responsible Gold Mining Principles</u>", and others. It also strives to extend higher standards prompted by the United Nations initiatives to all operation sites. However, in international operations, human rights standards may vary according to the regulations and cultures of different operational areas. On the basis of first adhering to local regulations, we strive to meet the standards of international best practices.

Articles 14 to 17 of our "Corporate Code of Conduct" outline our core objectives in respecting human rights and serve as the basis for the code of conduct and fundamental principles for our business interactions with all stakeholders, as well as being core to our value orientation when selecting business partners.



Zijin Mining Human Rights Governance Structure

### **Risk Management**

In managing human rights risks, we focus on the potential risks to people posed by corporate operations. We require all projects to gradually establish processes for identifying and managing human rights risks, especially in projects located in high-risk areas, and to integrate human rights assessments into their impact or risk assessment procedures. After conducting risk assessments, we have identified human rights issues in five areas, as shown in the illustration to the right, which are most closely related to our business. Consequently, we have taken corresponding management measures to mitigate human rights risks.

Key human rights	Connotation	Our management		
	The right to be free from environmental harm	The right to life is the supreme right that should not be undermined under any circumstances. Mining development can cause environmental degradation and pollution consequently endangering the life safety and physical and mental health of employees and community residents. In addition to this section, our practices for mitigating this risi can be found in the following chapters:		
	The right to climate justice			
The right to life	The right to life with dignity			
	The rights of children to survival, development, and welfare	Our Planet     Our Climate Transition     Occupational Health and Safety     Community		
Foomersie vielete	The right to work	0		
Economic rights	The right to rest, leisure, and holidays	Many mining projects are located in economically underdeveloped areas where jo		
Social rights	The right to social security	<ul> <li>opportunities and educational opportunities are limited. Combined with the high risk and intense nature of mining work, there are numerous human rights challenges. I addition to this section, our practices for mitigating this risk can be found in the followin chapters:</li> <li>Employee Development</li> <li>Occupational Health and Safety</li> <li>Communit</li> </ul>		
	The right to an adequate standard of living			
Culture Luislate	The right to education			
Cultural rights	The right to participate in cultural life			
(	The right to be free from slavery and forced labour	о ————————————————————————————————————		
Civil and political rights	The right to free, prior, and informed consent	Every individual is entitled to civil and political rights to ensure their fundament freedoms and protect them from the threat of enslavement. In our internation		
	The right to freedom of assembly and association	operations, due to the involvement of different countries' labour laws, we must pa special attention to the risks associated with "forced labour" and "child labour". Ou		
	The right to freedom of thought, belief and religion	workforce consists of individuals from diverse cultural and religious backgrounds, and improper management could lead to discrimination, harming their rights to freedon of thought and religious belief. Furthermore, some of our projects are located in close		
	The right to freedom of speech	proximity to indigenous communities, necessitating that we fully guarantee their "right free, prior, and informed consent".		
	The right to privacy			

### Strategy and Management Approach

In 2023, our Company has significantly enhanced our human rights governance framework by establishing and continuously refining our risk identification and management mechanisms. We have expanded our research and compliance with international human rights policies, laws, and regulations to enhance our internal routine checks and audit standards. Furthermore, we would gradually implement thirdparty human rights audits across our subsidiaries. During the reporting period, we did not find any incidents of human rights violations.

### **O** Labour Rights

Guided by the United Nations Guiding Principles on Business and Human Rights and legal regulations in the countries where our projects are located, we set our human rights management benchmarks. During the reporting period, we have bolstered our labour rights management by collaborating with authoritative third-party law firms to produce labour compliance handbooks for the 11 countries where our main projects operate. Covering aspects such as minimum wage, working hours, leave, anti-discrimination measures, and the right to freedom of association, among other labour rights issues, these handbooks are instrumental in assisting our subsidiaries across various regions in managing labour in compliance with legal and regulatory standards, thereby safeguarding workers' rights. The labour compliance handbooks undergo annual revisions by the subsidiaries, reflecting updates in local laws and regulations. All personnel engaged in human resources management are required to comprehensively understand the handbook contents and utilise the information as a crucial reference in assessing employability credentials. We conduct regular and random checks on our subsidiaries' human rights compliance, imposing penalties for significant infractions and supervising corrective and remedial actions. If our company inadvertently causes an event that infringes upon or damages human rights, we will implement corrective measures to mitigate the harm and impact as much as possible.

# Eradication of Child Labour

We mandate all operational projects to strictly adhere to either the national legal age for employment or the standards set by International Labour Organisation's Convention No. 138, whichever is higher. Our robust recruitment vetting procedures prevent the inadvertent hiring of child labour, and we require our contractors, suppliers, and thirdparty recruitment agencies to avoid employing underage workers, to assess the risk of such occurrences, and to take timely remedial actions.

#### Elimination of Forced Labour

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We follow a risk assessment process to prevent the risks associated with modern slavery and forced labour, continually enhancing our operations and supply chain human rights risk management to decrease the risk of employing forced labour. Our labour compliance handbook, which covers everything from the introduction to basic labour systems to hiring and managing personnel, serves as a guide for conducting labour management activities and mitigating forced labour risks across various stages. During the reporting period, we also invited professional labour lawyers, social responsibility standards auditors, and human rights experts from United Nations to train all our human resource management personnel, systemically enhancing our compliance with labour regulations and the protection of workers' rights.



#### Freedom of Association and Collective Bargaining

We support the negotiation and signing of the "Employee Wage Collective Agreement" and the "Employee Collective Labour Contract" by union representatives to safeguard employees' legal rights, with employees having the freedom to join or withdraw from unions. When significant operational changes occur that might adversely affect our employees, the Company will notify them in advance to minimise the negative impacts. In the reporting period, our Serbia Zijin Copper and RGM projects concluded collective agreement negotiations that lasted over a year, reaching common ground with the union regarding wage increases, leave, bonus distribution, and other employee-related concerns. By the end of 2023, our collective bargaining agreements had achieved a coverage rate of 74.68%.



#### Anti-discrimination and Anti-harassment

Adhering to the "Workplace Sexual Harassment Prevention and Penalisation Policy", we conduct training and education, disseminate legal knowledge, and set up mechanisms to prevent and punish workplace sexual harassment, fostering a "zero tolerance" stance towards such conduct. During the reporting period, we partnered with a renowned international compliance training company to offer our employees online courses on preventing workplace harassment and discrimination.

### ○ Indigenous Peoples and Cultural Heritage Conservation

In Zijin Mining's international operations, interactions with different cultures are inevitable, and we approach local communities with an attitude of equality and inclusiveness, especially when it comes to the traditional culture of indigenous groups. We actively fund cultural and festive activities within the community, supporting the protection and inheritance of local traditional festivals, customs, and cultural events. We are committed to engaging with indigenous peoples in accordance with the United Nations Declaration on the Rights of Indigenous Peoples and the principles of Free, Prior and Informed Consent (FPIC). We recognise that indigenous peoples possess unique traditional cultures and a deep reliance on their lands, and we fully respect their rights, interests, desires, and cultures as well as their natural resource-based lifestyles. During the reporting period, no incidents involving violations of indigenous peoples' rights were found. In the processes of land acquisition and resettlement, we follow the requirements of the International Finance Corporation's (IFC) Performance Standard 8, striving to avoid impacts or damages on the traditional territories of indigenous peoples or significant cultural heritage sites surrounding our project areas. In unavoidable cases, we endeavour to obtain the free, prior, and informed consent of indigenous peoples and reach agreements via open, formal negotiations and consultations, establishing concordant protection or relocation agreements that minimise adverse impacts. During the reporting period, in response to significant changes in the heritage laws of Western Australia, our Norton Gold Fields project amended its indigenous communication processes to comply with more stringent legal requirements.

### ○ Artisanal and Small-scale Mining (ASM)

We are aware that in the regions where our projects are located, many communities have traditionally relied on small-scale artisanal mining as a vital source of economic income. However, we also recognise that many illegal mining activities are often associated with issues, including the improper use of toxic chemicals, environmental degradation, and the lack of labour protection equipment. These activities may be controlled by illegal armed groups, leading to serious human rights problems such as child labour and forced labour. These challenges require the joint efforts of companies, governments, and society. We are fully supportive of formalising traditional ASM miners, actively cooperating with local governments to help them operate legally, more scientifically, and efficiently. Subcontracting contracts are provided to secure local livelihoods for them. Through a range of community development projects, we improve the community's economic and educational environment, provide alternative livelihoods, and eliminate the socio-economic factors that contribute to illegal mining (for specific community development projects, please refer to the "Community" section of this report).

In addition, we collaborate with communities, governments, and educational institutions to mitigate the environmental, safety, and human rights negative impacts caused by illegal and unregulated mining on miners, the community, the Company, and our employees.



- In Suriname, RGM prioritised the issue of mitigating the impact of illegal ASM on communities during stakeholder meetings. The community participation and awareness-raising project has directly affected over 5,000 individuals. The company listens to local community views and concerns about this issue through regular community meetings and utilises mass media to highlight the safety risks and potential harm to community environmental health posed by illegal ASM activities, with a special focus on instructing minors not to engage in these activities.
- In Colombia, Continental Gold is actively working with local high schools and environmental management initiatives to analyse and study the environmental damage caused by disordered illegal ASM and the misuse of mercury. The company also fulfils its environmental assessment obligations regarding filling of underground voids and surface environmental rehabilitation in accordance with legal and regulatory requirements, and it provides support for the formalisation of small-scale and traditional miners.
- In DR Congo, to address the issue of child labour resulting from children mistakenly entering mining areas to collect minerals, COMMUS organised community summer camp activities. These activities enrich the children's holiday experiences, enhance their awareness of safety, and prevent them from inadvertently entering mining pits during the vacation period, thereby avoiding safety issues.



Aurora's "anti-bullying" human rights protection campaign

# Women's Processing Team at Zijin Continental Gold provides employment opportunities to women

Addressing women's employment issues in the area, Continental Gold has been implementing the "Women's Mining Team" project since 2019. This initiative offers technical and managerial training and support to a group of women and helps them establish their own companies, which carry out secondary manual recovery and utilisation of ores that are not suitable for industrial beneficiation through operational contracts. Continental Gold's first women's processing team, the Sociedad Mujeres de Mogotes, was founded in January 2020. After achieving operational stability, Continental Gold has subsequently supported the establishment of four more women's processing teams in surrounding communities. By the end of 2023, these women's processing teams have directly created jobs for 108 individuals and indirectly impacted 327 people, with 100% of the employees coming from the project's direct impact area and 96% being women. The establishment of the women's processing teams has not only broken the long-standing male dominance in the local mining industry but has

also had significant personal implications for their employees. Commonly, the team members are mothers or eldest daughters shouldering the family's financial responsibilities, many of whom were displaced and without income due to various problems. Now, they have secured stable livelihoods, can escape violence, independently support their families, and provide their children with opportunities for education and a decent place to live.

Due to their dedication to gender equality, inclusiveness, and empowerment of female leadership, these women's processing companies have earned several awards. In 2023, Olga Lucia Orduin from the formalised mining company Mogotes Women's Society received the "Self-Sufficient Mining Women Leader" award from the Antioquia Mining Women's Group. Also, the Higabra Women's Association was recognised as the "Best Company Committed to Gender Equality".



The Higabra Women's Association was awarded

### O Security and Human Rights Management

Zijin Mining follows the published Policy "<u>Statement on Security and Human Rights Protection</u>" and conducts security in a manner that respects human rights, protects the lives and property, freedoms and human rights of our employees, communities and other stakeholders that may be impacted by our operations, and endeavours to gain the trust of host communities. During the reporting period, we assessed and planned for the following core actions:



Establishment of communication and cooperation mechanisms between projects and local social security administrations to promote local security and human rights matters in projects;

Implementation of a security audit programme to include security service providers in security audits, identify issues and risks and make continuous improvements;

Regular training on the <u>"Voluntary Principles on Security and Human Rights"</u> and the Principles on the Use of Force, as well as on human rights protection awareness and human rights expertise for security personnel and mine police, covering personnel, equipment, training, processes and systems;

Ensure that risks related to human rights are effectively managed through the establishment of judicial points of presence at project sites, in cooperation with government authorities;

Integrate security and human rights management into the Company's ESG strategic planning and operations, requiring subsidiaries and third-party security companies to protect the safety of employees and the community with lawful, minimum use of force;

Professional security managers were hired for high-security-risk projects to develop analyses and security plans for each high-risk area project based on the local social situation, and special security risk management requirements were developed at special points in time, such as national elections, to guide projects in high-risk areas in their security management work;

Modern equipment is used to protect human rights, and technological security equipment such as thermal imaging cameras, infrared cameras, access control systems, security screening systems and drones are used in high-security-risk projects.

#### **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	790	789	99.87%
Third-party security personnel	1,488	1,481	99.53%
Total	2,278	2,270	99.65%

### O Human Rights and ESG Audits

As outlined in our risk analysis, as an important participant in the mining industry, we should focus on the broader concept of business and human rights, being aware of our business's impacts on the human rights of all stakeholders. These macro areas align with issues and content commonly addressed by ESG, sustainable development, and corporate social responsibility initiatives. Therefore, since 2022, Zijin Mining has continuously encouraged its subsidiaries to conduct targeted third-party ESG audits focusing on human rights.

During the reporting period, our headquarters and

Longnan Zijin in Gansu, China, completed thirdparty typo: assurance that complied with the World Gold Council's Responsible Gold Mining Principles (RGMPs), finding no significant non-compliances with the RGMPs requirements; our two subsidiaries in Serbia, Serbia Zijin Copper and Serbia Zijin Mining, have been synchronously advancing their certification efforts in line with the Social Accountability Standard (SA8000). Serbia Zijin Mining has officially received the certification, while Serbia Zijin Copper is expected to be certified by 2024; our Ashele Copper in Xinjiang, China, has engaged an independent third party to conduct a social responsibility audit.

### **Future Plans**

We are committed to continuously following and studying the United Nations and host countries' human rights laws and regulations to fully identify human rights risks and enhance our social responsibility management policies, standards, and processes.

We will maintain our momentum in advancing third-party ESG review efforts. In high-risk areas, we are spearheading human rights due diligence investigations, reinforcing ESG and human rights training for employees and contractors, and elevating their understanding and awareness of ESG principles and human rights concerns.

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Leveraging our ESG management platform, we aim to strengthen the identification and management of human rights risks among subsidiaries in high-risk regions.

We are also working to improve our grievance and appeals mechanisms, enabling our internal processes to more effectively recognise issues related to human rights.

Furthermore, we are dedicated to fully engaging in dialogue and cooperation with various stakeholders on human rights matters to create better practices together.

# **Our Planet**

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Environmental Management System (EMS)

30

Land Use

33

Water

Biodiversity Conservation

Emissions

Tailings Storage Facilities

# Environmental Management System (EMS)

## **Environmental Management**

As a large multinational mining group, Zijin Mining is committed to establishing and maintaining a comprehensive Environmental Management System (EMS) based on risk management aligned with the ISO 14001 standard. This initiative ensures that while we achieve our business objectives, we concurrently minimise the adverse environmental impacts of our business activities.

Within our environmental governance system, the Board's Strategic and Sustainable Development (ESG) Committee sets the Company's development goals and clarifies the direction of environmental management. At the same time, executive directors and vice-presidents are assigned to specifically guide the management of environmental issues. The Environmental Protection and Ecology Department at headquarters, led by the Environmental Protection Director, is dedicated to managing, guiding, and tracking various ecological and environmental issues. We have established specialised environmental protection and ecological management departments within all of our projects, and each plant (or section) has full-time (or part-time) environmental management personnel to ensure that environmental management concepts are integrated into specific business operations and frontline production processes.

This organisational structure unifies the management of six key issues: water resource management, land reclamation and mine closure rehabilitation, biodiversity conservation, solid waste management, emissions control, and climate change response. It achieves coordinated management across all environmental factors.



Zijin Mining Environmental Issues Governance Structure

## **PDCA Cycle Management**

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We use the "PDCA" (Plan-Do-Check-Act) cycle to continuously improve our environmental management system through closed-loop management. Based on regular internal and external audits, we continuously propose improvement plans to optimise risk management.

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.

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 plant 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.

In accordance with policies and standard requirements such as the "Regulations on Environmental Protection and Ecological Inspection and Management" and "Basic Standards for Environmental Order Management", we carry out regular internal environmental compliance inspection of subsidiaries and periodically entrust authoritative third parties to inspect mining and smelting enterprises. This helps our subsidiaries to identify and promptly address potential environmental risks.

By establishing a list of non-compliant items in environmental activities, we require the formulation of rectification plans to be completed within a specified period. We regularly track the progress of corrective measures to continuously improve our environmental performance.



We have continually carried out ISO 14001 Environmental Management System certification across all our production and operational sites. By the end of the reporting period, the certification coverage rate for our operational sites, compared to the baseline year of 2020, reached 97.5%, with our subsidiary Norton Gold Fields not yet having initiated certification. Moving forward, we will require all our production and operational units to obtain ISO 14001 certification or another environmental certification that is not inferior to this standard within three years of being under the control of Zijin Mining. During the reporting period, we conducted environmental compliance reviews of 38 production enterprises and issued "Environmental and Ecological Inspection Service Opinions".

Zijin Mining 2023 ESG Report | 31

### Lifecycle Environmental Management

Throughout the reporting period, our management approach for the entire lifecycle of environmental impacts was further refined. Before project acquisitions, deeper consideration was given to the impact of project construction on biodiversity. This involved more thoroughly incorporating factors such as sustainable ecological balance, ecological functions, and environmental context into our environmental due diligence. Concurrently, the construction phase of projects was more deeply integrated into the core scope of lifecycle management to mitigate the risk of accidental deviations from EMS controls during the project's lifespan. In the mine closure phase, we conducted an in-depth analysis of the societal value factors of the mines after closure to leave behind a green and sustainable resource for the local area.

With the goal of "All mines will meet the green mine assessment standards and all smelting and processing enterprises meet the green factory standards by 2030", we continue to push forward the construction of green mines and green factories.



## **Investment in Environmental Protection**

Adequate capital investment in environmental protection is the basis for us to carry out various environmental protection work. During the reporting period, we have maintained a stable and continuous capital investment in environmental protection work, and with the completion of a number of high-investment key environmental protection projects, the investment in environmental protection is expected to decline slightly and stabilise at a sufficient operational level.



### **Environmental Emergency Management**

In response to potential unforeseen circumstances, we have established a comprehensive environmental risk emergency management system. Guided by the "Emergency Plan for Environmental Emergencies", we ensure that the Company can act quickly in emergency situations to protect employee safety, reduce economic losses, and minimise negative environmental impacts as much as possible (for detailed emergency response management, please refer to the "Emergency Management" chapter of this report). All our production subsidiaries organise at least one environmental incident emergency drill each year, in order to enhance employees' response capabilities during emergencies, identify potential risks, and optimise emergency plans. Concerning the remaining risk exposures, we encourage our subsidiaries purchase environmental pollution liability insurance to further mitigate potential risks. By the end of the reporting period, a total of 16 subsidiaries have purchased such insurance.



# Water

Mining and smelting companies are highly dependent on water resources, and their production processes, such as mining, ore processing and smelting, are all closely related to water use. This high demand for water resources makes the sustainable water supply a crucial factor in the stable operation of the Company. Effective water risk management is therefore critical to the sustainability of our operations, and this has led us to focus on and continuously improve our water management to ensure that we achieve excellence in the use, protection and management of our water resources.



### **Risk Management**

With significant mining investment projects in 16 countries globally and 17 provinces (regions) in China, taking location-specific water management measures to ensure water security for ourselves and the surrounding communities is crucial. We analyse the current state of water resource utilisation in the projects' watershed or region, assess the impact of water withdrawal on the water bodies and surrounding stakeholders, and then take appropriate measures while continuously evaluating their reasonableness and effectiveness.

During the reporting period, we continued to use the Aqueduct<sup>™</sup> Water Risk Atlas tool developed by World Resources Institute (WRI) to conduct an annual overall water risk analysis for 47 subsidiaries, covering physical risk indicators that affect water quantity (such as baseline water stress, interannual variability, seasonal variability, drought risk, flood risk, etc.), physical risk indicators that affect water quality (such as untreated wastewater, coastal eutrophication trends), and regulatory and reputation risk indicators (such as drinking water issues, sanitation issues, etc.). The results showed that water risks in most regions have increased compared to 2022. According to research by the World Meteorological Organization (WMO), this is due to record high temperatures in 2023, with climate change and extreme weather gradually increasing water risk. As a result, global water risks analysed by the Aqueduct<sup>™</sup> Water Risk Atlas have generally risen.

To further confirm the material impact of regional water risk increases on us, we conducted detailed assessments of water management for assets in high-risk areas or above through internal interviews. We then appropriately adjusted the assessment results by combining the exposure risk coefficients of each asset to water stress. The results indicated that, by the end of the reporting period, 13 enterprises were located in areas with relatively high water risk (EH > 4). Upon investigating the actual operating conditions of each project, water sources in areas with high water risk are generally abundant. Surface water flow and groundwater levels at each water source are ample, and material water risks in the short to medium term are generally controllable. At the same time, we noted that Liex, our subsidiary, faces substantial water withdrawal pressure, with wetlands of high biodiversity value existing at the vicinity of the nearby lakes, prompting us to implement integrated stringent management for water resources and biodiversity issues for this project.

To refine and clarify water management content, we incorporated risk control into our water

management strategy, selecting significant water management issues based on relevancy. Senior environmental professionals and water resources managers at our subsidiaries provided their opinions on a range of developmental issues based on their in-depth theoretical knowledge and practical experience in their fields, helping to identify potential risks. We analysed interview data and ranked potential risks based on relevance and importance, including supply, drainage, water quality, sustainability, etc., to identify issues most relevant to the Company's water resources management strategy and sustainability goals. We identified six major water management risks and invited environmental professionals from all subsidiaries to rank them based on the enterprises' respective actual situations.

Risk Category	Risk Description	Importance Level <sup>1</sup>	Response Measures
Water Supply	Local water resources are relatively scarce, which may pose a risk of insufficient supply for production and operation.	3.6	<ul> <li>Conduct water resources surveys and assessments to ensure an accurate understanding of local water conditions, and create a reasonable water usage plan.</li> <li>Promote circular water utilisation technology to minimise reliance on local natural water sources.</li> <li>Establish cooperative relationships with local governments and communities to develop a shared water resource management plan, ensuring rational allocation and utilisation.</li> </ul>
Water Pollution	Waste water is generated during production and operation; leaks due to poor management can pollute surrounding water bodies.	2.5	<ul> <li>Maximise wastewater treatment and reuse within the facility to reduce external discharge.</li> <li>Equip advanced water treatment facilities to strictly control the total amount and concentration of pollutants, ensuring lawful and compliant discharge.</li> <li>Implement regular water quality monitoring and assessment, with real-time monitoring at discharge points to detect potential issues and prevent pollution.</li> <li>Advocate for green mining practices by adopting environmentally friendly production processes and using higher-quality raw materials with lower levels of pollutants.</li> </ul>
मूक की Impact on Aquatic Ecosystems	There are rivers, lakes, wetlands, and other aquatic ecosystems around production and operation areas requiring surface water extraction; improper management could lead to the destruction of the aquatic ecological balance.	4.1	<ul> <li>Develop an ecological protection plan to ensure that production and operation do not cause permanent damage to surrounding aquatic ecosystems.</li> <li>Establish collaborative mechanisms with local governments and environmental organisations to jointly monitor and assess the impact of mining activities on aquatic ecosystems.</li> </ul>
Groundwater Level Decline	Production and operation require the use of groundwater; large-scale extraction could cause a reduction in groundwater levels.	4.9	<ul> <li>Assess groundwater resource reserves to ensure that production and operation do not cause significant groundwater depletion.</li> <li>Promote water-saving technologies to reduce groundwater consumption during production and operation.</li> <li>Implement a groundwater monitoring system to promptly identify and address any declines in groundwater levels.</li> </ul>
Community Water Conflict	Production and operational activities may restrict the water usage of nearby communities or surrounding enterprises, affecting local residents' livelihoods.	5.0	<ul> <li>Establish regular communication mechanisms with surrounding communities to understand their water needs and concerns.</li> <li>Conduct social responsibility projects to improve local community water conditions and increase water resources utilisation efficiency.</li> <li>Participate in park water resource management decision-making to ensure the interests of all parties are fully considered and coordinated.</li> </ul>
Water Infrastructure Vulnerability	Production and operation may rely on local water infrastructure, which might become vulnerable in the face of extreme weather events and other conditions.	4.4	<ul> <li>Assess the vulnerability of surrounding water infrastructure and improve disaster resilience by constructing additional safeguard facilities or optimising existing infrastructure.</li> <li>Develop an emergency response plan to deal with the impact of natural disasters and other sudden events on water infrastructure.</li> <li>Enhance communication with local governments, parks, and stakeholders; adopt advanced technology and processes to improve the reliability and stability of surrounding water infrastructure.</li> </ul>

In response to the identified water risks, we have adopted a location-specific approach to risk mitigation, taking into account factors such as differences in water sources, climate, community needs, and uncertainties. Internally, we optimised production processes, continuously improved equipment and technology, enhanced water use efficiency, maximised water recycling, and devoted efforts to developing unconventional water sources like brackish water and mine water. These measures aim to reduce the pressure of our operations on local water resources and increase climate resilience. Externally, we established necessary communication

mechanisms with affected communities and stakeholders to effectively manage and share water resources; and we also considered the ecological conditions of the project locations to minimise the impact of our water usage on the ecological environment. Our water resource management system is overseen by the ESG Management Committee to ensure comprehensive compliance and continuous improvement in the effectiveness of water resources protection measures. During the reporting period, we did not experience any major incidents related to water withdrawal or discharge.

Note: 1. A smaller importance level in the materiality rating indicates that we are placing greater emphasis on the management of such risk.
# Strategy and Management Approach

We adhere to the highest standards in performing our water resources management and protection duties, following a broad range of regulations and guidelines including national environmental laws and regulations of the project locations such as the "Water Law of the Peoples' Republic of China" and the "Water Pollution Prevention and Control Law of the People's Republic of China", as well as international standards, such as the "Environment, Health, and Safety General Guidelines" issued by the International Finance Corporation (IFC), "Environmental, Health, and Safety Guidelines for Mining" and "Environmental, Heal

## O Water Withdrawal and Consumption Management

To uphold our commitment to responsible water use, ensure long-term healthy development of production and business operations, mitigate adverse impacts on local water resources and ecosystems, enhance resilience, and address the uncertainties of water availability due to climate change, we have implemented a series of measures to optimise our water withdrawal management and protect local water resources:

#### Optimising Project Site Locations

Project sites are selected as far away as possible from water sources or upstream river areas. We conduct water use analysis and assessments prior to water withdrawal, and enterprises that directly withdraw water from rivers, lakes, or underground are required to engage third parties to compile "Water Resources Assessment Reports". These reports analyse the sustainability of water extraction and its impact on surrounding stakeholders. Water quality in the surrounding areas must be inspected at least once per quarter.

#### O Developing Reasonable Water Management Plans

In areas where rainwater resources are abundant, we address the potential dissolution of pollutants in initial rainwater by treating it in water treatment facilities and it can be reused or discharged externally after testing. In areas where water risk is higher, we make every effort to maintain normal production operations unaffected by water stress while ensuring water use for community and ecological purposes. We take all measures to enhance the internal recycling rate of water resources, reduce the need for freshwater withdrawal, and ease local water pressure. By leveraging "water balance models" in various mining areas, we predict annual water inflow, usage, and outflow in the mines, enabling timely management of water-related risks and scientific adjustments to water use plans.

#### Adhering to Water Reuse Objectives

Water reuse is one of our important measures in water resources management, helping us fundamentally reduce water withdrawal, protect freshwater resources, and alleviate water resource pressure. During the reporting period, our total water withdrawal was 66.13 million tonnes, down by 9.1% compared to the previous reporting period. Our water re-use rate increased further to 94.80%, and the water intensity by revenue fell to 225.39 tonnes/RMB million, down 16.22% compared with 2020. During the reporting period, our total water discharge was 46.40 million tonnes. There were no incidents of illegal or non-compliant water withdrawal or discharge during the reporting period.

Guidelines for Base Metal Smelting and Refining", and local regulations in the overseas project locations. A "Policy Statement on Water Resources Management" has been issued, delineating the responsibility of the Company's Board of Directors and management for water resources management strategy and performance. Integration of water resources management into the Company's business planning has been undertaken to fulfil the commitment to responsible water use.





Water Withdrawal and Discharge<sup>2</sup> Million tonnes Tonne/RMB million revenue 120 350 296.04 300 100 269.04 269.00 225.39 250 80 72.71 66.13 200 60.56 60 51.52 50.77 46.40 45.23 150 42.29 40 100 20.56 20.82 20 50 ۵ 2021 2019 2020 2022 2023 Total water withdrawal Total water discharge Water intensity by revenue (Million tonnes) (Million tonnes) (Tonne/RMB million)

#### Note

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 are completed.

#### **Establishing a Comprehensive Monitoring System**

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We require all subsidiaries to monitor water quality at least quarterly, particularly around mining areas and plant regions, key internal areas (such as upstream and downstream of tailings storages, landfills, etc.), and other locations using groundwater monitoring wells. All discharge outlets are equipped with online monitoring systems operated by independent third parties, which are networked with the local environmental protection departments of the project sites for real-time monitoring. This allows us to promptly respond to changes in water quality and take appropriate measures. All of our enterprises discharging effluent have achieved full coverage of online water quality monitoring. Furthermore, enterprises that do not discharge wastewater externally, such as Serbia Zijin Mining and Zeravshan, have also set water quality monitoring points downstream to responsibly maintain the safety of surrounding water resources of the mining areas.



We are committed to maintaining a water reuse rate of no less than 90% and reducing water intensity by 10% by 2030 compared to 2020. To achieve this goal, we will continue to explore various water treatment technologies to improve water efficiency from the source. This includes source control and optimised regulation of acidic wastewater in non-ferrous mines, quality-based reuse of wastewater from processing, treatment and reuse of heavy metal wastewater from non-ferrous smelting; enhancing research and promotion of key water-saving technologies, such as advanced treatment and reuse of heavy metal wastewater in heavy from non-ferrous smelting, recycling technology for high-salinity wastewater in hydrometallurgy, treatment and resource recovery of acidic wastewater in heavy metal metallurgy, among others; and improving the level of digitalised water efficiency management. The objective is to attain profound integration of industrial water systems with digitisation, aiming to minimise the consumption of fresh water and maximise water use efficiency.

#### Advancing Infrastructure Development

We require all subsidiaries to strictly comply with local regulations to prevent leakage in water storage ponds, tailings dams, and heap leaching sites, including installing cutoff walls and other physical procedures or measures to protect river and groundwater resources in project locations. Given the increasingly apparent impact of extreme weather conditions globally and the challenges brought by excessive precipitation, we are designing and constructing our flood control projects to meet standards for once-in-a-hundred-years or once-in-a-thousand-years events to address the precipitation uncertainties brought about by climate change. In addition, we improve local community water conditions by implementing community projects, including the construction of water supply facilities and dams.

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The Zijinshan Gold and Copper Mine is located near the Tingjiang River Basin, which is the most essential source of water for the local communities. To reduce water withdrawal from the Tingjiang River Basin and ensure the domestic water supply for the local communities, the Zijinshan Gold and Copper Mine undertook technological renovation, strengthened water use control, and improved water recycling rate. During the reporting period, the Tingjiang River water withdrawal by Zijinshan Gold and Copper Mine was 736,000 tonnes, a reduction of 1,792,000 tonnes compared with the same period last year, ultimately achieving an annual water recycling rate of 96.72%, an increase of 5.35 percentage points compared with the previous reporting period.

Zijinshan Gold and Copper Mine follows national policies and actively responds to calls for action, trading the saved water quantities through the water right trading platform as per regulations. To actively fulfill its social responsibilities and safeguard the water rights of local residents, Zijinshan Gold and Copper Mine sold 1.5 million tonnes of water rights at a low price to the local water supply company, which will be used mainly for the domestic water supply of local residents. Looking ahead, Zijinshan Gold and Copper Mine will further explore water-saving potential, strengthen water withdrawal management, and utilise water rights reform policies to transfer more water rights to stakeholders in need, ensuring water security throughout the Tingjiang River Basin and domestic water supply for local residents.



#### O Wastewater Treatment

During our operations, wastewater arises from a variety of sources, including water discharged during mining, effluents from ore processing, leaching, flotation processing, and wastewater generated from smelting, extraction, and refining. We establish standardised wastewater treatment procedures tailored to the operational characteristics of each subsidiary and adopt advanced treatment technologies to minimise the generation of wastewater and reduce the uncertainty of wastewater discharge.

We place high importance on wastewater management, treating all wastewater for purification and recycling, thereby reducing reliance on fresh water and minimising wastewater discharge. For the small portion of water pollutants that need to be discharged, we conduct real-time online monitoring of the concentration of all discharged wastewater, to detect and address any anomalies promptly. Relying on the "Environmental and Ecological Information Management Platform", we track and monitor data on the total pollutants discharged.







# Discharge of Ammonia Nitrogen





We follow the principles of "separating rainwater from sewage, clean water from contaminated, reducing at the source, collecting by categories, treating by quality, and recycling" for the full lifecycle of water cycle management in mining areas. Wastewater is categorised to facilitate the separate recovery and treatment of industrial wastewater, domestic wastewater, initial rainwater, and later-stage rainwater. This ensures the rationality and effectiveness of wastewater management and the full utilisation of water resources. During the reporting period, our online monitoring coverage and compliance rate of wastewater discharge both reached 100%.

# Duobaoshan Copper Industry Wastewater Comprehensive Vilisation Project

Heilongjiang Duobaoshan Copper Industry carries out classified treatment and comprehensive utilisation of different types of industrial wastewater and domestic sewage produced, striving to improve the water recycling rate and reduce wastewater discharge to the greatest extent.

For pit-water from open-pit mining, some of it is pumped to the mineral processing plant for production use after being clarified through bottom sedimentation, while part is used for dust suppression in daily operations. The surplus pit-water generated during the flood season is conveyed to the tailings storage facility. For the wastewater generated in mineral processing, a portion is recycled for use after being drained into the mineral processing plant's return water pond, while the rest is discharged with tailings to the tailings storage facility. The tailings storage facility's wastewater is pumped by a dredger within the facility to the processing plant, allowing zero external discharge of wastewater from mineral processing. Concerning the production wastewater from the rare and precious metals plant, Duobaoshan treats it through the ammonia distillation section and then discharges it to the production wastewater treatment station for centralised treatment. The treated production wastewater can meet the secondary discharge standard stipulated in the national 'Integrated waste water discharge standard', and all treated wastewater will be delivered to the mineral processing plant for recycling. As for domestic sewage, Duobaoshan constructed and put into operation two domestic sewage treatment stations in 2023, with a total treatment scale of 1,800 m<sup>3</sup> per day. The treatment adopts the advanced and mature A/O biological treatment + MBR membrane treatment process, which has a short process flow and minor secondary pollution. The treated sewage can meet the Level 1A discharge standard stipulated in the 'Discharge standard of pollutants for municipal wastewater treatment plant' and can be directly recycled. By treating different types of wastewater, the safe and harmless recovery of wastewater is ensured. This significantly reduces the impact on surrounding water bodies and effectively improves the water recycling rate.



Regarding acid rock drainage (ARD), we work with external experts to assess and develop methods to reduce ARD generation in mining areas where it may occur based on the "<u>Global Acid Rock Drainage Guide</u>". 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	9	15.79%
- Mines where acid rock drainage is predicted to occur	0	0%
- Mines where acid rock drainage is actively mitigated	4	7.02%
- Mines where acid rock drainage is under treatment or remediation	5	8.77%

# **Future Plans**

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We aim to increase the efficiency of wastewater treatment and study more scenarios where treated wastewater can be reused to reduce the withdrawal of fresh water.

By continuously identifying changes in water risks, we can coordinate water usage balance with surrounding communities and the ecological environment, ensuring the water security of all stakeholders.



Zijin Mining's Water Cycle System

# Land Use

# **Risk Management**

Based on our analysis of interview results and risk prioritisation, the risks of heavy metal contamination and ecosystem destruction are currently the most pressing concerns in land management. We address the risk of ecosystem destruction through land reclamation and vegetation restoration, while avoiding the risk of heavy metal contamination through pollutant management. Furthermore, since there are currently few subsidiaries starting or about to start mine closure, this risk was initially ranked low due to the lack of immediate relevance to many enterprises. However, upon further evaluation, we have deemed mine closure an important land management risk, considering its significance and inevitability. Thus, we also categorise it as one of the most critical risks in land management.



Risk	Risk description	Levels of importance	Response measures
Land degradation	Production and operational activities may lead to physical, chemical, and biological changes in the soil, resulting in land impoverishment, erosion, and other forms of land degradation.	3.9	<ul> <li>Develop a sustainable land management plan to ensure the long-term availability and health of the land</li> <li>Implement regular land monitoring and assessments to promptly detect signs of land degradation and take targeted remediation measures.</li> </ul>
Ecosystem destruction	Production and operational activities may directly disrupt the local ecosystem, including the habitats of vegetation and wildlife.	3.7	<ul> <li>Develop ecological conservation plans to ensure that mining activities do not cause permanent damage to surrounding ecosystems.</li> <li>Implement ecological restoration projects in affected areas, including land reclamation and afforestation.</li> <li>Employ environmentally friendly mining technologies to reduce the impact on ecosystems.</li> </ul>
Land use conflicts	Production and operational activities may create conflicts with local communities and agricultural land, leading to disputes over land use rights.	4.6	<ul> <li>Engage in dialogue and negotiation with local communities to define land use boundaries and reduce the likelihood of land disputes.</li> <li>Clarify land use plans, adhering to relevant laws and standards, to prevent illegal occupation and use of land.</li> <li>Conduct regular land audits to ensure the legality and rationality of land use.</li> </ul>
Habitat fragmentation	Production and operational activities may result in habitat fragmentation, disrupting the existing ecological connectivity and impacting the migration and activities of wildlife.	4.8	<ul> <li>Adopt a centralised development model to reduce the possibility of habitat fragmentation</li> <li>Develop land planning and management plans to limit land fragmentation impacts from non-mining activities.</li> <li>Promote multifunctional land use within mining areas to mitigate the impact of fragmentation on ecosystems.</li> </ul>
Heavy metal contamination	The heavy metal pollutants generated by production and operational activities may enter the soil due to poor management, leading to soil contamination.	3.0	<ul> <li>Conduct environmental impact assessments, taking into account the effects of heavy metal discharges, and develop pollution control plans.</li> <li>Strictly adhere to heavy metal discharge standards, ensuring discharges comply with laws, regulations, and relevant policies.</li> <li>Equip with advanced pollution control equipment to reduce heavy metal discharges from mining activities.</li> <li>Implement regular soil and water quality monitoring to promptly detect potential heavy metal contamination.</li> <li>Promote green mining practices, reduce the use of harmful chemicals, and adopt environmentally friendly production processes.</li> </ul>
Mine closure risks	Improperly managed abandoned mining areas may cause long-term pollution and ecological damage to the surrounding environment.	5.0	<ul> <li>Develop mine closure plans, detailing land restoration and regeneration plans for after mine closure.</li> <li>Set up a dedicated account for funds and resources to be used for land management and restoration during the mine closure phase.</li> <li>Consult with local governments and communities to ensure that the mine closure plans comply with local regulations and social expectations.</li> <li>Implement regular mine closure effect assessments and timely adjust and improve mine closure plans.</li> </ul>

# **Strategy and Management Approach**

We are fully committed to advancing the development of green mines at all our project operational sites, integrating ecological restoration throughout the entire production and construction process, and adhering to the following principles:

Respect, conform to, and protect nature, and coexist harmoniously with nature.

Prioritise ecological prevention, avoid or minimise ecological damage as much as possible to maintain existing ecological environments.

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.

Incorporate the local natural features and human geography through environmental reengineering to achieve a harmonious unity between mining development and ecological environmental protection.

## ○ Land Use and Ecological Restoration

During the mining process, land is unavoidably disturbed, including the loss of vegetation cover, degradation of soil quality, and loss of ecosystems. Through scientifically sound utilisation plans and proactive restoration measures, land regeneration and restoration can be realised as soon as possible after mine closure. This promotes the recovery of vegetation and purification of water bodies, preventing land degradation and ecosystem destruction, thereby ensuring sustainable development of the mine's ecological environment. During the reporting period, due to production needs, we added approximately 4.2522 million square metres of land disturbance. For land that is stabilised and meets restoration conditions, we carried out ecological restoration work in line with the local climate and ecological conditions. In 2023, we invested a total of RMB369 million in a dedicated ecological restoration fund, restored about 6.2227 million square metres of vegetation, and planted approximately 3.8593 million trees and plants, aiming to achieve as much restoration as possible.





# Hunan Zijin Lithium Actively Undertakes Community Land Restoration Efforts

Hunan Zijin Lithium was established in July 2022 and, from the outset of project planning, has combined the protection of natural resources with economic development, fulfilling its due responsibilities for ecological and environmental protection and striving to address local historical ecological issues. After the company's project commenced, it was noted that there was an abandoned quarry near the mine that had been out of use for many years. Long-term extraction had led to land occupation, damage, and vegetation destruction at the quarry, resulting in exposed rock and deterioration of the natural environment, with a total damaged area of 16,273 square metres. Although no heavy metal pollution was caused, the quarry had significant negative impacts on the ecological environment, community safety, and groundwater quality. As a result, Hunan Zijin Lithium proactively reached out to the local government and took on the ecological restoration project of this abandoned quarry.

The successful restoration of the quarry and the identification of various drought-resistant plants suitable for local ecological restoration have accumulated valuable practical experience for our land restoration techniques. Looking ahead, building on this success, ecological restoration will continue to be a focus of our day-to-day operations, and we will actively cooperate with the local government to restore other nearby historical abandoned mine pits, contributing to green and sustainable development.



Shiziling Quarry after restoration

# ◎ Mine Closure and Post-closure

Zijin Mining adheres to the principle of following a consistent blueprint in whole-life-cycle development of mining projects. From the planning and design stages, we require each project to consider the mine closure plan in accordance with legal requirements, including the establishment of long-term closure objectives as well as specific closure goals and land use plans. Firstly, by crafting detailed closure plans, we clarify the overarching objectives and measures for mine closure. Secondly, we undertake ecological restoration projects such as afforestation, land rehabilitation, and wildlife protection to progressively return the site to a natural state. In parallel, we work closely with local communities to provide ongoing support, promoting social and economic transformation to mitigate the impact of ceased mining activities, and to preserve local cultural and historical heritage. Lastly, we establish a post-closure monitoring system to regularly evaluate the effectiveness of the closure and to adjust and improve management plans as necessary. To ensure the smooth implementation of the closure plan, we have set up a designated fund to guarantee the successful execution of all related projects. Through a series of measures, we aim to achieve comprehensive goals in mine closure management and lay the foundation for sustainable development.

#### Over the reporting period, West Copper in Qinghai was our only enterprise in the mine closure phase, continuing to conduct responsible closure operations. West Copper has collated and analysed ecological data from the past five years around the mine and has taken other social factors into account to compile the "Deerni Copper Mine Closure Work Plan", which is now in its fourth edition and comprises a list of 110 closure projects. Given Deerni Copper Mine's location in a cold and high-altitude area, ecological restoration post-closure presents significant challenges. Through collaboration with several domestic universities and research institutions, West Copper is continuously exploring difficult issues, including tailings planting and high-altitude ecological restoration, to develop Zijin's solutions for the ecological recovery at cold and high-altitude regions. By the end of the reporting period, 42.22 hectares had been restored as part of the annual plan, with a cumulative total of 199.22 hectares. Going forward, West Copper will continue to methodically advance subsequent closure work in accordance with the plan.

# **Future Plans**



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In response to the harsh ecological environments of high altitudes, cold climates, and water scarcity encountered in various projects, we are exploring regionally restoration technologies suitable for each region.

Complete surveys of land disturbances for all our projects to ensure that all lands impacted by our operations receive appropriate rehabilitation.

We are committed to the high-quality completion of existing mine closure activities, and to summarising these experiences for the benefit of future mine closures at other sites.

# **Biodiversity Conservation**

# **Risk Management**

Our operational sites are all located on land, hence terrestrial and freshwater biodiversity is our primary focus. To scientifically devise our biodiversity conservation plan, during the reporting period, we partnered with professional third parties to carry out biodiversity risk screenings and proposed improvement plans for our main and operating projects across nine countries. This comprehensive approach allowed us to understand the biodiversity risks at our operating locations and to prioritise these risks to tailor our conservation measures. Based on the dependency of the localities on mineral resources, we identified eight different risk factors related to operational and locational risks.

Utilising third-party data, GIS analysis, and expert judgement, we ranked each project's intrinsic biodiversity risks posed by mining operations. Risks were categorised into six priority levels and corresponding improvement plans were devised according to the severity of the risk and specific risk factors. In the future, we will further refine our biodiversity studies and develop improved approaches to address biodiversity issues based on the outcomes of our research. Data and results of the studies will be shared with all stakeholders in the spirit of the "Framework" upon completion of our research.

# **Strategy and Management Approach**

- We are profoundly aware that our mining and smelting activities can have certain impacts on the natural environment and ecosystems. Our operations often involve unavoidable issues such as land disturbance, vegetation loss, and ecosystem degradation, which pose threats to surrounding biodiversity. Through effective biodiversity management, we can mitigate the damage caused by mining activities to the adjacent ecological environment and protect the invaluable natural ecosystem.
- In the process of conducting our biodiversity work, we have acknowledged the growing concerns of global stakeholders. Therefore, we reaffirm our recognition of the biodiversity crisis outlined in the "Kunming-Montreal Global Biodiversity Framework" (hereinafter referred to as the "Framework") and support the efficacy of the frameworks and tools released by the Taskforce on Nature-related Financial Disclosures (TNFD). We have received and understood the six expectations presented to us by Nature Action 100. To achieve our objective of establishing and implementing biodiversity management plans for all our mines by 2030, we adhere to the International Finance Corporation (IFC) "Environmental, Health, and Safety Guidelines" and consider the expectations and insights of various stakeholders, continually refining our management practices to ensure a net positive contribution to maintaining biodiversity at our project locations.
- Our "Policy Statement on Protection of the Ecological Environment" sets forth five commitments and 14 policies/actions. We guide all operational sites to draft and periodically update their "Mine Geological Environment Protection and Land Reclamation Plans".



# **○** Ecological Recovery

The benefits of biodiversity management for corporate sustainability are significant. We adhere to the ecological civilisation principles of "respecting, conforming to, and protecting the nature", and we uphold the principle of according equal importance to mineral resource development and ecological environment protection.

Taking into account the Company's business development, we adopt nature-based solutions and collaborate with various stakeholders to explore the most suitable methods of ecological restoration.

Our approach to biodiversity management includes a variety of measures, applying the mitigation hierarchy of "avoid, mitigate, restore, and, where necessary, compensate" for biodiversity losses. During project planning and

before commencing surface-disturbing activities, we assess the potential biodiversity impacts of our operations and strive to avoid and offset them. Throughout the construction and operation of a project, we employ low-impact technologies to reduce habitat destruction and lower pollutant emissions. Additionally, we establish a dedicated ecological restoration fund. During a mine's entire life cycle, we employ land reclamation and afforestation to minimise the ecosystem impact on surrounding areas, and we promptly begin land restoration and species recovery after project closure. Moreover, we cooperate with local environmental organisations and relevant research institutions to jointly promote wildlife protection and land reclamation research, providing reliable technical support for biodiversity management.

#### Liex Biodiversity Conservation Action

The Tres Quebradas Salar operated by Liex is situated in the Andean plateau at 4,100 metres altitude. Given the project's unique ecological environment, Liex commissioned third-party professional agencies to carry out targeted environmental baseline surveys and biodiversity monitoring. The monitoring is divided into three units based on area, with 11 animal and 22 plant monitoring points established. Subjects include botany, limnology, zoology, phytoplankton, terrestrial vertebrates, aquatic organisms, etc., with quarterly monitoring of the abundance, numbers, bioindicators, community structure and temporal dynamics, migration status, and species changes among biota in the impacted area.

In addition to quarterly biodiversity monitoring, Liex has also taken multiple measures to protect biodiversity. Firstly, they established environmental protection guidelines and provided timely treatment for injured animals. Secondly, biological sensitive areas have been set up, where production and operating activities are restricted; signs and speed limit boards have been put up to remind individuals to avoid and protect animals. Thirdly, with an investment of over RMB2 million, a 5km long green belt consisting of more than ten types of local tree species was established around the perimeter of the processing plant. More than ten thous and tree saplings were planted to form an ecological barrier, protect habitats, and enrich biodiversity.

The biodiversity conservation efforts of Liex have achieved considerable success. The third-party monitoring results indicate that Liex's project did not have significant impacts on the surrounding biodiversity.

In the future, as Liex transitions from the construction phase to the production phase, greater attention will be given to the changes in biodiversity associated with production activities. Regular biodiversity monitoring and awareness campaigns will be conducted to enhance conservation awareness and implement protective measures, ensuring the harmonious coexistence of economic development and nature.

# **Future Plans**

Based on the results of biodiversity risk analysis, we are advancing biodiversity management in key areas.

In the spirit of multilateralism embodied by the "Framework", we maintain an open attitude towards cooperation with biodiversity professional institutions, contributing to the global efforts for biodiversity conservation.

Biodiversity monitoring at Liex

# Waste

# **Risk Management**

Our mining and smelting activities inevitably result in a considerable volume of emissions, including various types of solid waste, gaseous emissions, and aquatic pollutants. Improper management may lead to serious issues such as soil contamination, water pollution, and deterioration of air quality, all of which pose threats to the ecological environment and public health. Hence, a comprehensive emissions management system is crucial for our sustainable development, as it pertains not only to environmental protection but also to the long-term viability and social responsibility of the Company.



Risk	Response measures	Description of measures
Waste disposal causes	Waste source control	<ul> <li>Use materials that are low in toxicity, less harmful, and generate minimal waste for product manufacturing wherever possible.</li> <li>Enhance the conversion rate of raw materials and the yield of products by optimising production processes and pursuing technological innovation, thereby reducing waste generation.</li> </ul>
environmental pressure	Adopt best available techniques and best management practices	<ul> <li>Based on the specific circumstances and conditions of each project, select the most advanced treatment technologies to minimise the emission of harmful substances.</li> <li>Adhere to best management practices, encompassing aspects such as equipment maintenance, compliant operation, and staff training to ensure efficiency and safety in the treatment and disposal processes.</li> </ul>
	Develop waste management plan	<ul> <li>Establish a comprehensive waste management plan that includes monitoring, classification, storage, transportation, treatment, and disposal of waste.</li> <li>Develop clear management procedures and delineate responsibilities to ensure that every stage is governed by standardised operating protocols.</li> </ul>
Accidental loss of control	Set up waste storage areas	<ul> <li>Set up dedicated waste storage areas to ensure that various types of waste are stored correctly.</li> <li>Implement leak-proof and anti-seepage measures to prevent waste from leaking or spreading into the environment.</li> </ul>
over waste management	Conduct monitoring and assessment	<ul> <li>Establish air monitoring systems to continuously track atmospheric pollution levels, ensuring that air quality is not compromised.</li> <li>Conduct periodic waste risk assessments to identify potential environmental and health hazards.</li> </ul>
	Develop emergency response plans	<ul> <li>Develop emergency response plans, including emergency procedures, urgent notifications, and staff training.</li> <li>Conduct drills to ensure rapid and effective response to waste incidents in emergency situations.</li> </ul>
Non-compliant waste disposal methods	Implement full-process management	<ul> <li>Based on national standards and testing data, we conduct hierarchical management of waste and carry out differentiated management, control and treatment according to its characteristics.</li> <li>Set up relevant ledgers to continuously track the full lifecycle of various types of waste.</li> <li>Strengthen the access management of waste disposal suppliers, requiring external disposal companies to carry out proper disposal in accordance with relevant regulations.</li> </ul>

# Strategy and Management Approach

O We have incorporated waste management into our environmental goals management system, strictly abiding by local environmental protection laws and regulations of the project's location, such as the "Solid Waste Pollution Environment Prevention and Control Law of the People's Republic of China", "Pollution Control Standards for General Industrial Solid Waste Storage and Landfill" and "Pollution Control Standards for Hazardous Waste Storage", as well as adhering to international standards published by the International Finance Corporation (IFC) like the "Environmental, Health and Safety General Guidelines", "Environmental, Health, and Safety Guidelines for Mining" and "Environmental, Health, and Safety Guidelines for Base Metal Smelting and Refining", adopting the strictest standards to control our waste emissions.

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For solid waste management, we utilise a riskbased classification approach, differentiating between various types, hazards, and risk levels of waste and improving resource recovery and utilisation rates to minimise the ecological impact of solid waste generated from production and operational activities.

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Regarding gaseous emissions, we believe that providing clean air is our inescapable duty. As activities such as blasting, crushing, processing, and transportation unavoidably generate air pollutants, we will continually minimise the negative impact on the atmosphere from production activities through process optimisation, technological innovation, and pollution prevention measures.

#### **O** Non-hazardous Waste

We adhere to the principle of "resource utilisation" in dealing with general waste, by transferring the reusable parts of discarded waste. To achieve the goal of "increasing the comprehensive utilisation rate of general waste from 5% to 18% by 2030 compared to 2020", we encourage the implementation of clean production technologies. Through technological innovation and process improvement, we reduce waste generation while enhancing production efficiency. By means of integrated utilisation, valuable resources within the waste are extracted and reclaimed, achieving sustainable resource utilisation, effectively reducing the total volume of waste, and mitigating the negative environmental impact.

The primary types of waste generated by our mines are tailings and waste rock. To store and landfill tailings and waste rock, we strictly establish tailings storage facilities and waste rock dumps in compliance with national standards of the host countries and make prudent plans. We implement anti-leakage and anti-seepage measures to prevent waste from leaking or diffusing into the environment, averting adverse effects on the surrounding ecosystems. To ensure the safety of groundwater quality downstream of the tailings dams, we continuously monitor the discharge of tailings water, the groundwater environment, and the status of soil contamination, and have established a rapid and comprehensive emergency response plans. In order to reduce stockpiling, enhance the utilisation rate of waste, and minimise the impact of waste rock extraction on the surface ecological environment, we prioritise the use of tailings and waste rock for underground backfilling and other comprehensive uses where the physical and chemical

properties permit. Additionally, we achieve a balance of filling the goaves left by mining underground through the mixed backfilling treatment of tail sand and waste rock, effectively controlling ground pressure activities, managing underground goaves, and preventing surface subsidence and other production safety hazards.

During the reporting period, the generation volume of our tailings was 177.44 million tonnes, with a comprehensive utilisation rate of 23.86%; waste rock volume was 772.94 million tonnes, with a comprehensive utilisation rate of 12.03%.



#### **Tailings Recycling**

Indicator	Unit	2023	2022	2021	2020	2019
-Internally recycling	Million tonnes	41.61	35.61	25.28	20.73	16.46
-Externally recycling		0.71	1.34	0.004	0	0

In smelting, the types of solid waste we produce are primarily related to pyrometallurgy, hydrometallurgy, and waste generated during the treatment of smelting wastewater, including mineral processing tailings, smelting slag, and neutralisation slag that contain heavy metal elements. We consistently adhere to the principles of "reduction, resource utilisation, and harmlessness", taking a series of measures from the source to the final stages to reduce the volume of solid waste. Minimisation of waste generation at the source has been achieved through the selection of clean raw materials, utilisation of advanced equipment, enhancement of production processes, and optimisation of management procedures. At the final stage, we carry out harmless disposal of waste and recover valuable elements through a series of treatments to further reduce the total waste volume. The remaining slag is all stored in designated slag disposal sites that meet national standards and have been environmentally verified by third parties, with measures taken to prevent leakage, ensuring environmental safety. Furthermore, we actively seek external collaboration to broaden the treatment channels for non-hazardous solid waste. We pursue comprehensive utilisation through sales and by using the waste as building materials, where feasible, based on physicochemical conditions.

During the reporting period, our operations generated approximately 959.72 million tonnes of non-hazardous waste, with a comprehensive utilisation rate of 14.88%, and the non-hazardous waste generated intensity by revenue was 32.71 tonnes/RMB10,000.





#### Non-hazardous Waste Generated

## **○** Hazardous Waste

Our hazardous waste primarily originates from the smelting process, including lead-arsenic filter cakes, copper telluride slag, and white fumes produced during copper smelting; cyanide slag from gold smelting; as well as waste mineral oil generated by equipment operation and maintenance.

Adhering to a principle of responsibility, we implement effective hazardous waste management measures at all stages of production and operation to minimise potential environmental and health risks. We strictly adhere to the regulations and policies of the locations where our operations are based, following all provisions concerning classification, storage, transportation, treatment, and disposal to ensure safe management. Hazardous waste is classified according to its nature and treatment requirements, adopting the same full lifecycle closed-loop management policy applied to hazardous chemicals.

**In terms of prevention and control**, we use non-toxic or less-toxic raw materials to replace those that are highly toxic and pose serious hazards. Through optimising production processes, improving energy efficiency, and enhancing resource utilisation rates, we aim to reduce the generation of hazardous waste.

**Regarding hazardous waste disposal**, we follow host country regulations and standards as well as international guidelines, adopting the most suitable disposal methods based on the type and properties of the hazardous waste. For waste that has recovery value, we make every effort to adopt comprehensive utilisation methods, transforming it into harmless substances or high-value products, while also implementing strict pollution control measures to strictly control emissions and the generation of secondary pollutants during the utilisation process. For hazardous waste that cannot be recovered or disposed of, we entrust qualified third-party organisations to carry out disposal in accordance with the requirements of the projects' host countries, monitoring their treatment qualifications, disposal technologies, and methods to ensure that the hazardous waste we hand over is properly and safely treated. Through diversified hazardous waste disposal methods, we achieve the recovery, reuse, and efficient disposal of solid waste, minimising resource wastage and striving to reduce negative environmental impacts and disruptions to biodiversity, thereby creating healthier and more sustainable living environments for local communities. Furthermore, we continuously introduce and develop advanced hazardous waste treatment equipment and technologies, promoting corporate technological innovation and the enhancement of research capabilities, to achieve the joint development of the economy and environment.



During the reporting period, the total volume of hazardous waste generated by us further decreased to 160.89 thousand tonnes, with a comprehensive utilisation rate increasing to 48.98%. The hazardous waste generation intensity by revenue was 0.55 tonnes/RMB million, a decrease of intensity of 53.78% compared with the same period last year.





## **O** Air Emissions

During the mining process, operations such as open-pit mining, blasting, excavation and transportation, ore crushing, and grinding inevitably generate a certain amount of dust. Therefore, we implement a series of control and governance measures to protect the health and safety of on-site workers. Measures to control dust dispersion

through process or equipment design optimisation include underground ventilation and dust exhaustion, sealed dust control during crushing and belt conveyance, and dust capture by dust collectors. In some key operational areas, water mist spray systems are installed to suppress dust dispersion. We maintain smooth and well-kept roads to reduce vehicular jolting and thus lower the generation and risk of dust lift-off. In ore stacking areas, we adopt cover and encapsulation methods to prevent weathering, leaching, and dust dispersion of ores. Ventilation systems and dust collection systems are installed in areas with high levels of dust generation to centrally process and manage the dust produced, mitigating the impact on the surrounding environment.

In smelting production, due to the physical and chemical actions like fuel combustion, material transport by airflow, and metal volatilisation and oxidation at high temperature, large amount of smoke and dust are inevitably generated. However, these by-products are considered valuable materials for comprehensive utilisation. Purification and recovery not only avoid negative environmental impacts but also enhance economic benefits. A large proportion of  $SO_2$  and  $SO_3$  present in the flue gas are the primary raw materials for our production of sulphuric acid as a by-product. The dust carries a variety of metals and compounds, including copper, zinc, and precious metals such as gold and silver. We typically capture dust using electrostatic dust collection systems and utilise the valuable metals therein before conducting harmless disposal, thereby achieving resource recovery while reducing the impact of heavy metals on surrounding soils. At major flue gas emission points, we have installed online monitoring equipment to dynamically monitor the concentration of discharged gas in real time. Independent third-party institutions are regularly engaged to conduct testing on general emission outlets and environmental impact.

During the reporting period, the output of our main products such as copper and gold continued to rise. However, through continuous improvements in exhaust gas treatment processes, the emissions of our main exhaust gases remained stable. Nitrogen oxides emission intensity by revenue was 0.23 tonnes/RMB100 million, a decrease of 21.14% compared with 2022; sulphur dioxide emission intensity by revenue was 0.46 tonnes/RMB100 million, which was roughly unchanged from 2022.



# The technological transformation of Serbian Zijin Copper smelter helps the green development of century-old mining city

The TIR smelting plant operated by Serbia Zijin Copper has a long history. Before Zijin Mining's takeover, the plant's main processing equipment and techniques were outdated and traditional energy sources such as wood, coal, and heavy oil were still used as fuel. This led to high carbon emissions, high pollution, high energy consumption, and flue gas emissions exceeding standards, causing serious local air pollution, with the smelter's environmental issues frequently criticised by the public.

After Zijin Mining entered the Serbian market in 2018, the new jointly invested company Serbia Zijin Copper prioritised the construction of the environmental treatment system, implementing technological renovation projects at the TIR smelting plant primarily to address the issues of flue gas exceeding standards and high energy consumption. Serbia Zijin Copper invested over USD300 million to replace the plant's old equipment and processes and also added wastewater treatment facilities. Furthermore, USD8 million were invested to build an integrated flue gas treatment system.

During the reporting period, the technological renovation project of Serbia Zijin Copper smelter was successfully completed and put into operation, with post-renovation emissions of sulphur dioxide decreasing by over 90%. According to data from the Serbian Environmental Protection Agency's National Air Automatic Online Monitoring System (SEPA), the average concentration of  $SO_2$  at various automatic online monitoring stations around the smelter in 2023 was only 10.6% of the air quality limit value, a 53.51% reduction compared to before Zijin Mining's presence. Serbia Zijin Copper's smelter technological upgrade effectively improved the long-standing flue gas pollution issues in Bor. Going forward, Serbia Zijin Copper will continue to monitor and control emissions compliance, contributing towards transforming Bor into one of Europe's most important green, low-carbon, and sustainable non-ferrous metal cities.



Note: Data from Serbian National Air Monitoring network, yellow line is AQI<sub>502</sub> limit value for good air quality in Serbia

# **Future Plans**





Serbia Zijin Copper Smelter after completion of technological renovation

# **Tailings Storage Facilities**

# Governance

Based on the inherent risk characteristics of tailings storage facilities, our tailings management system is fundamentally reliant on our occupational health and safety governance system, while some environmental protection measures and post-closure restoration and greening work are carried out in accordance with our environmental governance system. (For details, please refer to the "Environmental Management System" and "Occupational Health and Safety" sections of this report.).

# **Risk Management**

During the reporting period, we conducted a comprehensive assessment of the potential risks of all tailings storage facilities and re-analysed the anticipated incident impacts for each facility using credible failure models and the current surrounding conditions. Based on the latest monitoring results, all our tailings storage facilities are classified as low potential risk. The overall risk associated with the tailings storage facilities is considered controllable. For all identifiable potential impacts, we are continuing to mitigate them by constructing additional barriers, enhancing routine inspections, and other measures. Starting from this reporting period, we disclose the risk assessment and review status of our managed tailings storage facilities alongside the ESG performance overview on the Company's official website.

Main risk factors	Monitoring indicators (combining manual and online monitoring)
Partial instability or collapse of tailings dams	Monitoring of internal and external displacement parameters, phreatic line, etc., of the dam body.
Over-topping due to floodwaters	Monitoring of dry beach length and slope, precipitation, reservoir water level, and other parameters.
Blockage or damage to flood discharge facilities	Monitoring of inlet and outlet of the flood discharge system, flood discharge tunnels, interception ditches, dam surface drainage ditches, and other facilities.

# **Strategy and Management Approach**

We manage our tailings storage facilities in accordance with China's "Tailings Storage Facility Safety Regulations", the legal and regulatory requirements of the projects' host countries, and the "Global Industry Standard on Tailings Management", committing to building a tailings storage management system that conforms to global best practices and covers the entire lifecycle of the tailings storage facilities including design, construction, operation, closure, and post-closure.

In response to the primary risks associated with major tailings storage facilities, we have further advanced the development of the online tailings monitoring system, which currently covers 70.2% of operational tailings infrastructure. This allows for real-time monitoring and early warning of key safety information such as dam displacement, phreatic line, dry beach length, and reservoir water level. For the risks of dam failure and overtopping, which are of utmost concern to all stakeholders, we have taken the following measures:

Establish a dedicated organisation, setting up a Tailings Management Department staffed with professional technical personnel responsible for tailings management.

Establish and implement a safety management system for tailings storage facilities to ensure standardisation of tailings storage safety.

Ensure quality control of tailings dam construction, flood prevention facilities, and sealing projects to guarantee that tailings safety facilities are qualified and up to standard.

Implement monitoring of operational safety indicators for tailings storage facilities.

Conduct safety inspections, patrols, and periodic assessments of safety status.



Tailings storage facility of Malipo Zijin Tungsten

We have also established a comprehensive emergency response system and an emergency management team for our tailings storage facilities, realising round-the-clock 7\*24 hour minute-level emergency response at all operational sites. This is to avoid and mitigate the negative impact of any tailings storage facility incidents on the environment and communities in the event of unexpected situations. For a detailed description of the comprehensive emergency management system, please refer to the Emergency Management section of this report.

Based on the risk characteristics and operational practices associated with tailings storage facilities, we maintain a lifecycle monitoring of the operational status and risk scenarios through a periodic review system for tailings storage facilities. Our tailings storage facilities reviews are divided into four levels based on the qualification of reviewers, the depth of review, and other factors: "Internal Review", "Dam Safety Review (DSR)", "Annual Performance Review", and "Independent Tailings Review Board (ITRB) or Senior Technical Reviewers".

The outcomes of the reviews are a vital foundation for improving our management measures. We optimise our management practices based on the results of the various reviews, including adjusting tailings discharge technical plans and adding overflow ponds and flood retention dams as targeted measures to continuously control the risks of the tailings storage facilities. For high-level review recommendations requiring improvements, we assess the effectiveness of the improvements through internal review or annual performance review, achieving a combination of different levels of review.

As of the end of the reporting period, we managed a total of 60 tailings storage facilities: 37 in operation, 2 in closure process, and the rest in a decommissioned or closure state. There is presently one new tailings storage facilities planned, which is in the design phase. During the reporting period, we carried out 2 annual performance reviews (or EOR reviews), 5 internal reviews, and 12 Dam Safety Reviews (DSR), managing to close the loop on all identified hazards and potential improvement projects. Results from routine inspections indicate that all operating tailings storage facilities are secure and controllable.



Review Level R	Review Frequency	Key Focus of Review
Daily Inspections At	At least once per day	Dam body displacement, reservoir water level, phreatic line, tailings entering storage and other operational indicators
Internal Review	rregular	Drainage tunnels, interception ditches, dam body displacement, reservoir water level, dry beach, seepage line, etc.
Annual Performance Review (or EOR Review) O	Once annually	Tailings dam risk assessment, safety management, key safety facilities, inflow quantity, etc.
Dam Safety Review (DSR)	every 1-3 years	Tailings dam flood routing verification, tailings dam risk assessment, safety management, key safety facility inspection, etc.
Independent Tailings Review Board (ITRB) or Senior Technical Reviewers	at least once every 3 years	Tailings dam stability, tailings dam risk assessment, safety management review, key safety facility inspection, etc.

# **Our Climate Transition**



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 processing plants. Climate Change

# **Climate Change**

# Governance

We have established a robust climate governance structure to research on issues related to climate change, identify climate risks and opportunities, and devise measures to address the potential impact of extreme climate disasters on our assets. Simultaneously, an ESG governance system led by the Board of Directors has been set up, which sets medium- and long-term developmental goals for ESG and climate-related issues. Through the ESG Management Committee and the "Dual Carbon" Management Work Leading Group, supervisory execution is undertaken by departments and subsidiaries to implement the ESG and climate-related objectives. Meanwhile, certain energy conservation and carbon reduction transformations, as well as financial guantification tasks, are supported collaboratively by the technology research and development system and the financial management system. (Please refer to the "Environmental Management System" and "Technology Innovation" sections of this report for details.)

# Zijin Mining Climate Goal

Short-term target



2050 achieve Carbon Neutrality

O Committed to a gradual reduction of the GHG emissions intensity (with a base year of 2020) reduce GHG emissions per unit of industrial value added by 20% reduce GHG emissions per unit of industrial value added by 38%

More than 30% renewable energy use by 2030



Manage ---> Monitor --->

Zijin Mining Climate Change Governance Structure

# **Climate Risk & Opportunity Management**

During the reporting period, we identified and updated our risk evaluations from two dimensions: the physical impact of climate change and climate-related financial risks. Targeted adjustments have been made to our climate risk management plan. In order to quantify financial information related to climate opportunities and risks, collaborative efforts with various partners are underway to explore reliable and highly feasible quantitative models and practical tools for climate-related financial data. During the reporting period, we continued to use the scenario models provided by the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA) consistent with the previous reporting period. We prioritised the identification and qualitative analysis of risks and opportunities that could have a potential financial impact. We will proceed with further financial quantification work after obtaining suitable quantitative tools in the future.

## O Climate Physical Risks & Opportunities

During the reporting period, we utilised the low greenhouse gas emission scenario (SSP1-2.6) and high greenhouse gas emissions scenario (SSP5-8.5) from the IPCC to assess the primary impacts of various physical climate risks and opportunities. The assessments were generally consistent with the results evaluated in our "Climate Change Action Plan". In addition, we conducted deeper identification and research into water risk, which is significantly affected by climate change (for detailed water risk identification and management, please refer to the "Water" section of this report).

In response to the various physical climate risks we face, we have accelerated the upgrading of water conservancy facilities and enhanced the weather resistance and construction standards of water conservancy structures, transportation facilities, etc. All types of flood defenses and dams are gradually upgraded to withstand once-in-a-thousandyears rainfall events, providing ample operational resilience for future climate change impacts. We have also taken proactive emergency preparedness for all types of physical risks. Each of our mines has developed emergency response plans for extreme weather events such as heavy rain, snowstorms, and hail. Through planned production suspension for inspection, infrastructure restoration, and timely resumption of work, we have experienced no significant operational impacts from physical climate risks during the reporting period.

While we acknowledge the risks posed by physical factors related to climate change, we have also identified some short and medium-term, isolated positive effects. Due to global climate change, the frost period and extreme low-temperature events are expected to shorten in the short term for some of our projects in high-latitude areas, which will result in prolonged annual work duration. Additionally, some projects located in semi-arid regions have experienced an increase in precipitation, alleviating their water acquisition risks and easing water pressure on surrounding communities and ecosystems to a certain extent. However, these positive effects are transient and may turn into negative impacts in the future, such as instability of permafrost in high-latitude areas and other unforeseen negative consequences. This prompts us to pay closer attention to all kinds of effects brought about by climate change.

		Physical Risk	Assessment <sup>1</sup>		
Climate	Baseline	203	30s	205	50s
disaster	Dusenne	SSP1-2.6	SSP5-8.5	SSP1-2.6	SSP5-8.5
Extreme high	0%	5%	12%	14%	45%
temperature	(0)	(2)	(5)	(6)	(19)
Extreme low	7%	0%	2%	0%	0%
temperature	(3)	(0)	(1)	(0)	(0)
River flooding	5%	5%	5%	5%	5%
	(2)	(2)	(2)	(2)	(2)
Flooding from extreme precipitation	5% (2)	5% (2)	5% (2)	5% (2)	5% (2)
Typhoon	5%	10%	12%	12%	12%
	(2)	(4)	(5)	(5)	(5)
Landslide	17%	24%	17%	26%	19%
	(7)	(10)	(7)	(11)	(8)
Water stress and	14%	21%	21%	24%	24%
drought	(6)	(9)	(9)	(10)	(10)
Wildfire		10% (4)	12% (5)	14% (6)	17% (7)

Note: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 scenarios, with the colour 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, or minor impact on overall assets; Very low: exposure to climate hazards is minimal, with limited potential impact on assets.

## ○ Climate Transition Risks & Opportunities

During the reporting period, we continued to use the IEA's low emission scenario (Sustainable Development Scenario, SDS) and high emission scenario (Stated Policies Scenario, STEPS) to analyse climate transition risks and opportunities. We also maintained continuous tracking and research on global policies, regulations, market changes, among other factors, and consistently applied fair market factors to adjust our climate transition risks and opportunities. We believe that the global climate-related factor changes during the reporting period remained broadly consistent with the progress assessed in our "Climate Change Action Plan". Based on our ongoing tracking and impact estimation of global market factors, we identified a series of potential policy changes related to carbon tax and carbon pricing during the reporting period, which are generally in line with our expectations of transition risk changes.

We consider these policies to enhance global climate ambition, conducive to achieving the Paris Agreement goals. Such policies could potentially realise Zijin Mining's expectations regarding carbon pricing risks, while proposals by the World Trade Organization (WTO) for a global agreement on carbon pricing may mitigate the impact of these risks. However, given that the current carbon price in China is low globally, it implies that our carbon costs are very likely to rise due to new policy impacts, regardless of whether a global carbon pricing agreement is reached.

Taking into account policy changes and other climate transition-related factors, and after further comparing Zijin Mining's new energy installation and construction plans and estimated carbon emission curves, there is a considerable likelihood that through technological reforms and various emission reduction measures, we can successfully reduce carbon footprint of Zijin's products before the implementation and expansion of various carbon tax policies to non-ferrous metal products. This reduction would decrease the need to purchase carbon allowance guotas and carbon tax, thus reducing the potential future carbon tax costs of our products. At the same time, we have accelerated the adoption of clean energy substitutes and new energy technologies to further reduce potential financial impacts due to mismatches in the carbon reduction timeline.



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		-0.42	
Risk	Uncertainty in electricity prices	-0.06	0.00	0.00	
Risk	R&D and investment in low-carbon transition technologies	-0.10		-0.14	
Opportunity	Increased customer demand for low- carbon products and services	0.14		0.26	
Opportunity	Use of renewable energy	0.08		0.21	
High risk	Medium risk Low risk Ne	eutral High opportu	nity Medium	ity Low opportunity	

# **Strategy and Management Approach**

Our carbon peak target for 2029 and carbon neutrality target for 2050 are ambitious and necessary significant reforms to our existing operational models are required. We enhance our management capabilities for greenhouse gas (GHG) emissions and energy consumption through continuous optimizations of our management systems. The objective is to adhere to the transition roadmap outlined in our "Climate Change Action Plan" by employing a combination approach. This approach encompasses the substitution of clean fuels, adoption of clean energy alternatives, implementation of energy-saving technologies, carbon offsetting, and carbon trading.

## **O** Management System Optimisation

During the reporting period, our climate strategy remained stable, with objectives and carbon reduction pathways advancing steadily. We issued guidelines related to "dual carbon" (carbon peak and carbon neutrality) efforts to assist our subsidiaries in measuring, monitoring, reporting, and managing their carbon emissions, as well

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formulating appropriate emission reduction strategies. Working in unison, we aim to fulfil our commitments to addressing global climate change. These guidelines utilise the Life of Mine (LOM) approach and Life Cycle Assessment (LCA) methodology to guide mining and smelting enterprises in their "dual carbon" initiatives.

Life of Mine (LOM) carbon management is the comprehensive and systematic management and control of carbon emissions throughout the life of mine for mining companies to reduce environmental impacts and achieve sustainable development.

#### Mining enterprise greenhouse gas management methodology

- Carbon emission inventory list preparation. Detailed records and analyses of carbon emissions during mine production, including raw materials, process equipment, energy consumption, means of transport and other major aspects involving carbon emissions.
- Carbon emissions assessment and target setting. Carbon emission assessment and setting of reasonable reduction targets based on analyses of carbon emission inventories.
- Design and implementation of emission reduction measures. Based on the results of carbon emission assessment, mining enterprises can formulate corresponding emission reduction measures and gradually promote their implementation.
- Monitoring and reporting. In order to assess the results of emission reductions and supervise the effectiveness of the implementation of emission reduction measures, mining enterprises should establish a carbon emission monitoring system and conduct regular monitoring and reporting.

Life Cycle Assessment (LCA) is a methodology for aggregating and assessing the environmental impacts and potential impacts of all inputs and outputs during the life cycle of our products. By identifying and quantifying the consumption of energy and raw materials as well as the emission of pollutants, it comprehensively analyses and evaluates all the environmental impacts caused by a product throughout its entire life cycle, "from cradle to grave".

# Smelting enterprise greenhouse gas management methodology

- Carbon emission statistics and inventory list preparation. Record and analyse in detail the carbon emissions in the production process, including the extraction and processing of raw materials, the operation of process equipment, the manufacture of main products and by-products, energy and power consumption, pollutant management, waste disposal, transport and other major aspects of carbon emissions.
  - **Impact evaluation and target setting.** Based on the analysis of the carbon emission inventory list, try to use the carbon footprint evaluation method to refine the carbon emission generating links, identify the high energy-consuming and carbon-emitting links in the production of products, and find out the room for improvement in order to set the appropriate carbon reduction target.

**Emission reduction plans and carbon control measures.** Based on the results of the carbon emission assessment and the carbon control targets set, adopt corresponding emission reduction measures.

Data tracking and reporting feedback. In order to assess the effectiveness of our emission reduction measures, we have established a carbon monitoring system to ensure that each stage of the product life cycle can be monitored and evaluated, and that regular monitoring and feedback are conducted.

Process optimisation and continuous improvement. Regularly assess and review the effectiveness of the carbon management plan, establish a closed-loop feedback mechanism, and adjust the process based on the feedback to optimise the carbon management process.

#### © Energy Saving and Emission Reduction

During the reporting period, our subsidiaries gradually implemented and completed various energy-saving and emission reduction projects as planned in accordance with the emission reduction programme planning, exceeded the annual clean energy installation targets, extensively carried out technological transformation and further reduced greenhouse gas emissions per tonne of products.

#### Clean Energy Alternatives

Turning to green electricity is an essential path for our business to achieve carbon neutrality. Clean energy substitution measures have a highly positive impact on the sustainable development of mining and smelting enterprises, including environmental protection, energy conservation and emissions reduction, technological innovation, and sustainable growth. Appropriate clean energy transition strategies are developed by taking into account factors such as market demand, technological feasibility, and economic efficiency. Utilising clean energy to replace current electricity usage is an inevitable choice for us to achieve net-zero emissions. We make full use of idle land, rooftop space of plants, and nearby rivers at our existing mining and smelting sites to develop and construct photovoltaic (PV), hydropower, and wind power renewable energy projects, actively seeking external partnerships to increase the proportion of green electricity. In 2023, we invested a total of RMB456 million in special funds for climate change, adding 76.57MW of installed capacity for clean energy, including key projects such as Bayannur Zijin's 5.9MWp PV, Zijin Copper's 2.6MW PV, and Heilongjiang Zijin Copper's 10.3MW PV, which were completed and connected to the grid. As of the end of the reporting period, the total installed capacity reached 244.05MW. During the reporting period, the Company generated 380.90GWh of clean electricity. The local government where Zeravshan, our subsidiary, is located has confirmed that all purchased electricity is now from hydropower, achieving a successful transition to zero carbon emissions from electricity.



#### **Clean energy generated**

Туре	Unit	2023	2022	2021
Photovoltaic power	GWh	83.05	31.49	6.16
Hydropower	GWh	262.01	201.43	107.10
Other renewable energy	GWh	35.84	24.54	1

#### Lakkor Resources' "Zero Carbon Lithium Extraction" Source-Grid-Load-Storage Project Aids "Green Lithium" Development

Lithium, often referred to as "white petroleum", is essential for the global transition to new energy. In the process of lithium resource development, how to reduce carbon emissions to provide the world with low-carbon "green lithium" has been a long-term exploration goal for Zijin.

From the project's planning phase, Lakkor Resources collaborated with external energy companies to develop photovoltaic (PV) power projects. During the reporting period, the first phase of the 10MW PV project commenced operation in April, enabling Lakkor Resources to use PV power from 8 am to 8 pm; from 8 pm to 8 am of the following day, diesel generators and PV storage devices supply power.

To further effectively utilise resources, the Company has been collaborating on the Lakkor Tso "Zero Carbon Lithium Extraction" Source-Grid-Load-Storage demonstration project, featuring an overall construction scale of 340MW PV, 540MWh storage capacity, plus a 10MW back-pressure unit and molten salt thermal storage. The project commenced in July 2023, with expectations that by 2025, all electricity and steam consumed by the company will be 100% supplied by renewable energy from the power station, minimising the carbon footprint of the lithium products to the greatest extent possible.



# Clean Fuel Substitution

The significant emissions of carbon dioxide from combustion of fossil fuels contribute to increased atmospheric CO<sub>2</sub> concentrations, exacerbating the greenhouse effect. To achieve the targets of carbon peak and carbon neutrality, it is necessary to substitute clean fuels for fossil energy at the end-use level. We have implemented the "oil-toelectricity" initiative, with all our mining enterprises either introducing or preparing to introduce pure electric mining trucks, electric dump trucks, and new energy heavy trucks to replace existing dieselpowered vehicles. By the end of 2023, several enterprises, including Luoyang Kunyu, Longnan Zijin, Jinbao, Julong Copper, and Zijin Zinc, had accomplished large-scale replacement, totalling 292 electric vehicles of various types by the end of the reporting period. The implementation of these "oil-to-electricity" projects has significantly reduced carbon emissions from the mines and lowered energy costs. The low noise and zero-emission features of electric mining trucks also help to better



Electric mining truck in Zijinshan

ensure the production safety and occupational health of employees. Additionally, we have vigorously pursued the "coal-to-electricity" transition within our subsidiaries, using electric furnaces to replace traditional coal furnaces, effectively reducing pollutant emissions and achieving energy savings and consumption reduction. Substantial progress has also been made in the promising field of ammonia-hydrogen energy technology.



#### Number of electric vehicles

#### Ammonia-Hydrogen Energy Technology Continues to Achieve Breakthroughs

FZU Zijin Hydrogen Power suggests using ammonia as a "bridge" between renewable energy and hydrogen energy, developing a "zero-carbon cycle" of innovative technology and its supporting industry chain from "renewable energy - ammonia energy storage - hydrogen energy". This includes a focus on the exploration of green ammonia synthesis, safe and low-cost ammonia storage and transportation, and "zero-carbon" ammonia utilisation.

Addressing the challenges of high electrical energy consumption and high production costs in electrolytic hydrogen production, the Zijin Mining R&D team proposed a new solution during the reporting period. A related paper, published in "ACS Energy Letters", points out that by adding a new caesium-containing material, the hydrogen production rate of solid oxide electrolysis cells could be significantly increased compared to traditional electrolytic hydrogen production technology.

FZU Zijin Hydrogen Power's research on the application of "ammonia-hydrogen" energy achieved breakthroughs over the reporting period. In collaboration with a bus manufacturer, they developed the world's first prototype of an ammonia hydrogen fuel cell bus. This vehicle uses liquid ammonia as a safe and efficient fuel, enabling on-board immediate production and use of hydrogen energy. The bus has a range of up to 900 kilometres, providing an important technological path for the commercialisation of "ammonia-hydrogen" energy in the field of vehicular fuel cells. FZU Zijin Hydrogen Power independently designed and manufactured 5kW, 10kW, and 100kW "ammonia-hydrogen" fuel cell distributed power sources, which achieve immediate production and use of hydrogen and safe, efficient electricity generation, overcoming the challenges of hydrogen storage and transport. Featuring low noise and extended operating range, they are currently providing power security services to six companies and industrial parks. Among them, the 10kW "ammonia-hydrogen" technical equipment in the energy field. In the future, FZU Zijin Hydrogen Power will continue its research work, steadily expanding the application of hydrogen energy in transportation, energy storage, power generation, industrial sectors, etc., contributing to the utilization of clean energy and the achievement of "dual carbon" targets.



#### $(\emptyset)$ Energy-saving and emission-reducing technology substitution

Innovation and application of low-carbon technologies are crucial means to achieve low-carbon development in the non-ferrous metals industry. Through technological innovation, production process optimisation, introduction of advanced equipment, acceleration of outdated equipment replacement and renovation, we enhance production efficiency and effectively reduce carbon emissions per unit of product. Mining enterprises optimise production processes and vigorously promote technological transformations such as "more crushing and less grinding", effectively reducing GHG emissions per unit of ore processed; smelting enterprises employ heat pump technology and carry out low-temperature waste heat recovery projects for power generation, steam drying of furnace materials, etc.; thus reducing the waste of industrial waste heat resources and further decreasing greenhouse gas emissions.

# Jilin Zijin Copper's "Transformation of High-Temperature Waste Heat Nitrogen Heat Exchange" for Emission Reduction and Consumption Decrease

The dry desulphurisation activated coke regenerative desorption process at Jilin Zijin Copper requires substantial electricity for heating, leading to high carbon emissions from the desulphurisation process. To fully utilise waste heat and reduce electricity consumption of the dry-method desulphurisation process, during the reporting period, Jilin Zijin Copper invested over RMB4.3 million to innovatively carry out the waste heat nitrogen heat exchange project. Through in-depth research on industrial technology and reaction principles, Jilin Zijin Copper overhauled the high-energy-consuming dry desulphurisation process, introducing a nitrogen heat exchanger to utilise high-temperature flue gas for heat exchange and replacing the original desulphurisation electric heating, thereby reducing electricity used for desulphurisation.

After the implementation of the waste heat nitrogen heat exchange project, there was a significant reduction in electricity consumption and greenhouse gas emissions during the dry desulphurisation phase. Before the technological upgrade, the process consumed an average of 532,000 kWh of electricity per month, which has been reduced to an average of 68,000 kWh after the renovation. It is estimated that this will decrease carbon emissions by 4,320 tonnes per year for Jilin Zijin Copper, greatly promoting the company's sustainable development of the green economy and achieving the "dual carbon" targets, thus realising the coordinated development of the enterprise and the environment.



#### Votes:

1. The greenhouse gas emission from unit industrial added value refers to the greenhouse gas emission generated by the added value part of the enterprise in the production process.

2. Industrial added value shall be calculated under the income method (i.e., industrial added value = depreciation of fixed assets + remuneration of workers + net production tax + operating surplus).

# Indicators and performance

During the reporting period, the total Scope 1 and Scope 2 greenhouse gas (GHG) emissions within the Company's operational scope were 8.41 million  $tCO_2e$ , an increase of 8.10% compared to the previous reporting period. The increase in carbon emissions is attributed to the rapid development phase of our business. The commissioning of new projects inevitably results in a rise in total carbon emissions, aligning with the anticipated trend outlined in our "Climate Change Action Plan".

Benefiting from the low-carbon design of our newly constructed projects and energy-saving measures adopted by existing ones, our GHG emissions intensity per industrial added value in 2023 was  $1.53tCO_2e$ , a decrease of 1.46% compared to 2022, aligning with our expectations of a gradual decline in GHG emissions intensity. Regarding the carbon emission intensity per unit of product, there was a notable downward trend in the carbon equivalent emissions

of our main products. During the reporting period, our GHG emissions intensity of copper equivalent was  $3.34tCO_2e/tCu$ , a reduction of 7.5% compared to 2022; in 2023, the GHG emissions intensity per ounce of gold was  $497kgCO_2e/ozAu$ , a 5.9% decrease from 2022.

Furthermore, we are continuously perfecting a comprehensive accounting system that includes Scope 3 GHG emissions, which will gradually cover the upstream and downstream activities of our business. Considering the availability and accuracy of data, this report only discloses the business travel part of Scope 3 for the time being. We use the spend based method for the carbon accounting of business travel, employing emission factors from the GHG Protocol. The total carbon dioxide emissions for Scope 3 - Business Travel during the reporting period were 3,429 tonnes.



Similar to the trend of greenhouse gas emissions, our total energy consumption also increased to 19,022.46GWh due to the commissioning of new projects and capacity enhancements. However, thanks to energy structure adjustments and technological innovations, our greenhouse gas emissions per unit of energy consumed further decreased by 7.41% to 442.1tCO<sub>2</sub>e/GWh, aligning with the energy trend outlook required to achieve our carbon peak by 2029.

During the reporting period, our subsidiary in the Democratic Republic of the Congo experienced fluctuations in electricity supply, leading to a significant increase in direct energy use due to the reliance on diesel to maintain production stability. It is anticipated that direct energy use will decrease following the completion of local grid renovations. With the acceleration of the global energy transition, the proportion of renewable energy within our power usage increased further to 43.94%, accounting for 21.48% of our total energy usage.

Energy type		Unit	2023	2022	2021	2020
Total energy co	onsumption	GWh	19,022.46	16,294.54	15,236.89	14,271.21
	Paraffin	Tonne	379	592	1,481	1,833
	Diesel	Tonne	529,236	392,930	345,894	256,856
Direct energy	Gasoline	Tonne	614	1,061	1,502	1,457
	Coal	Tonne	528,850	560,249	636,682	859,536
	Other direct energy	TJ	17.93	57.16	230.61	425.46
Indiract opprøv	Electricity	GWh	9,300.31	8,126.68	6,881.20	5,335.00
Indirect energy	Steam	TJ	-1,495.55	-935.70	-802.56	-783.41



Norton's Solar Power Array

#### **Electricity Consumption by Source**

■ Non-green power ■ Solar power ■ Purchased clean energy ■ Hydropower ■ Other renewable energy



Given the background of the global energy market's progressive transition, our emissions are similar to the analysis set out in the "NZE Scenario" of our "Climate Change Action Plan". We will continue to adopt proactive measures to provide green and low-carbon mineral raw materials for global climate action.

# **Future Plans**

1 Refine the carbon emissions intensity assessment system, detailing the assessment indicator requirements, and bring all high-carbon emitting enterprises into the emissions reduction assessment.	
2 Improve the carbon accounting system, continuously refine methods for carbon emissions data collection, and gradually advance the work of carbon footprint accounting for major products and Scope 3 greenhouse gas emissions of the Group.	
3 Conduct Life Cycle Assessment (LCA) evaluations on smelting enterprises.	
4 While advancing mine greening projects, increase investment and support for forest carbon sink projects.	



# **Employee Development**

Adhering to the values of "delivering long-term value for common development" and people approach of "putting value creators first", 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. Promoting the establishment of a human resources system aligned with global development and international standards, efforts are consistently made to create an environment that attracts a diverse range of professional talents around the world. Our aim is to ensure employees' welfare to the greatest extent, meet their aspirations for a better life, and achieve synergistic win-win outcomes for the enterprise and its employees.

# Governance

Our overarching employee development strategy is formulated by the Board of Directors, implemented under the leadership of the President by the management team, with the Human Resources Department serving as the primary responsible entity for the Company's human resources functions. The Human Resources Department is responsible for a range of employee development-related affairs, including compensation and benefits, diversity in employment, labour rights, and employee training. All of our subsidiaries have established Human Resources departments or HR specialists to carry out related tasks and to safeguard employee rights.



Zijin Mining Employee Development Governance Structure

# **Risk Management**

As our business expands and the processes of globalisation and internationalisation accelerate, our Company's demand for talent, particularly international and professional technical talent, continues to grow. However, due to the industry-specific traits of the mining sector, our attractiveness to talent is insufficient, resulting in significant pressure to retain talent and the risk of an inadequate talent reserve for long-term development.

Risk Category	Risk Description
High Recruitment Pressure and High Attrition Rates	With global economic development and changing employment concepts among the youth, the number of students enrolling and graduating in mining-related disciplines is declining year by year. Coupled with the public's stereotypical impression of the mining industry as having high safety risks and poor working conditions, mining enterprises face obstacles in talent recruitment and risks of talent loss.
Lack of Local Technical and Managerial Talent	We are committed to creating jobs for local communities and prioritise recruiting talent from local residents. However, many mining projects are located in economically underdeveloped areas with limited educational resources, leading to a shortage of local technical personnel and middle to high-level management.
Shortage of International and Diverse Talent	Zijin Mining's global transformation requires talents with international perspectives to meet the needs of our projects operating across different countries. However, it has been found that the depth of our international talent transformation is insufficient. There is a certain gap between the number and requirement of high-quality international management talents and some core technical talents, which will become one of the main risks in the future implementation of our strategy and international operations.



# **Strategy and Management Approach**

Zijin Mining follows the "<u>United Nations Guiding Principles on Business and Human Rights</u>," the "<u>Universal Declaration of Human Rights</u>," and the "<u>Declaration on Fundamental Principles and Rights at Work</u>" by the International Labour Organization, as well as implementing corresponding policies to ensure the legal rights and interests of employees are protected. We provide "<u>Corporate Code of Conduct</u>" training to every new employee upon joining and require all employees to adhere to the code of conduct characterized by "integrity, diligence, collaboration, and amity," fostering a culture of respect and honesty and promoting a diverse and inclusive workplace environment. During the reporting period, we revised the "Measures for Affiliate Ranking." Taking into account different business forms, company sizes, operational management difficulties, and core economic indicators, we revised the evaluation standards based on value creation as the primary metric, providing the foundational basis for grading subsidiaries, setting management positions, and determining salaries.

Employee Rights and Talent Development	Policy and System Guarantees
Diversity and Inclusiveness	General Human Resource Policy Corporate Code of Conduct
Equal Opportunity and Promotion	Job Management Measures Measures for Affiliate Ranking
Working Hours and	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 Detailed Rules on the Foreign Language Requirements for Certain HR Processes
Cultivation of Outstanding Talents	Outstanding Young Talents Management Measures Senior Management Reserves Management Measures Measures for Management of the Training of Fresh College Graduates

# O Diversity Strategy

To address the challenges of internationalisation and the scarcity of talents in the mining industry, we have integrated our diverse employment policies with the Company's strategy, striving to build a globally-minded, internationally competitive, and host-country-aligned diverse talent system and workforce structure. As of the end of the reporting period, the Company's total number of employees reached 55,239, with female employee ratio of 14.92%; the total number of contractors was 30,459.

**Total Number of Employees** 

60,000 55.239 48.836 50,000 43.876 40.000 30.000 20.000 10.000 Λ 2020 2021 2022 2023 Total Number of Employees Employees by Age<sup>1</sup> **Employees by Gender** 14.83% 14.92% ■ < 30 ■ 30 ≤ N < 50 ■ ≥50 Male Female

Note: 1.The workforce statistics were calculated after aggregating the numbers submitted by each subsidiary. Due to local laws or practices on antidiscrimination, 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 by gender and age in 2023 is approximately 2,022.

We implement a global talent strategy to build a diverse staff, establishing a talent system with a global perspective. During the reporting period, based on the principle of voluntariness, the Company carried out recruitment efforts across several countries and universities, continuously attracting talents from different backgrounds, cultures, and ethnicities to join Zijin based on their aspirations, thereby enhancing the Company's diversity. To date, our employees come from 76 countries and regions around the world, providing Zijin Mining with an ongoing stream of creativity for development.



We actively implement a localised employment policy, employing and cultivating local talents, and setting annual plans for hiring local staff at senior, middle, and operational management levels in overseas subsidiaries. A variety of recruiting, training, and internship programs are conducted targeting local universities, actively addressing employment issues in the project-hosting countries and regions. All subsidiaries are required to enhance the proportion of local employees in their management teams and incorporate diversity factors, including nationality, as essential criteria in senior management training plans. During the reporting period, we revised our hiring policies to require subsidiaries to prioritize local recruitment for vacant positions and to comprehensively strengthen community-oriented skill-based training, enabling participants to meet the Company's employment standards. If no suitable local candidates are available, global recruitment should be conducted. During the reporting period, our local employment rate reached 95.85%.

#### Employees by Region

## ○ Attracting and Retaining Talents

As Zijin Mining's process of globalization and internationalization accelerates, in response to the shortage of international talents, the Company has in recent years focused on creating a hub for global professional talents of all kinds, continually enhancing talent recruitment and development to combat the widespread talent shortage in the mining industry. We have strengthened the recruitment and attraction of high-quality, international, and in-demand talents, especially young talents. During the reporting period, we recruited 7,570 new employees, with 48.57% being young talents under the age of 30, approximately 44.98% recruited from outside China, and 31.76% holding a bachelor's degree or higher, improving our personnel structure and quality, and elevating our level of diversity.

#### **Employee Turnover**

Type of change	Total number	By gender	r By age			By region	
		Male Female	<30	30≤N<50	≥50	Within China	Outside China
Turnover rate	8.00%	7.92% 8.47%	11.99%	7.28%	5.19%	9.96%	6.01%

However, we recognize that young talents face significant uncertainties in employment and future career choices, leading to higher turnover rates, posing a considerable challenge for our talent retention efforts. To address this issue, we have taken a series of measures to help young employees quickly adapt to the workplace, clarify their future career paths, improve their working and living conditions, and enhance their sense of identification and belonging to the Company, thereby increasing staff retention rates. During the reporting period, we implemented the "Graduates' Headstart Program" where newly hired university graduates, in addition to receiving induction training and grassroots experience, are assigned two mentors to help them quickly integrate and grow, formulate their future career plans, and refine the assessment of new employees.

Our subsidiaries are mandated to regularly host "Young Talent Symposiums", during which Company leaders directly engage with employees, addressing their concerns about living conditions, work environment, and future development, and offering timely solutions to enhance employee satisfaction. These talent retention measures have also achieved certain effects, with a decrease in the overall employee turnover rate compared to last year. Our excellent practices in employer branding, talent attraction and recruitment, and talent retention have been recognized externally. During the reporting period, Zijin Mining was named on the LinkedIn Global List of Most Attractive Employers for Graduates and received the Forbes Best ESG Practice Employer Award, enhancing the Company's image as a responsible employer in areas such as human rights, employment relations, and value creation.

## O Comprehensive Remuneration and Benefits

We have established a fair and employee development-focused incentive salary structure based on performance assessment in accordance with the "Remuneration Policy". This structure is centered on basic salary and adheres to the principle of equal pay for equal work, supplemented by performance bonuses, allowances, and benefits. It ensures that employees receive remuneration commensurate with the position they hold and the value they create, and they participate in performance incentive plans. During the reporting period, we formulated and expanded the employee stock ownership scheme, establishing a long-term incentive and talent retention mechanism.

A comprehensive remuneration and benefits plan has been developed. For recruiting social talents, we offer competitive salaries above the industry standard to attract more talent resources for the Company. For current employees, we ensure welfare protections by providing various types of social insurance and parental and maternity leaves. In addition, we offer additional benefits to all staff, such as housing security, rental subsidies, continuing education support, and festival bonuses. Facilities like libraries, medical rooms, gyms, and entertainment amenities are also provided, enhancing employees' sense of well-being and belonging, thereby improving talent retention rates.



Serbian Employees' Holiday Celebration

## ○ Multi-path Development and Training

Guided by internationalisation, we have established a comprehensive, multi-tiered education and training system with broad coverage to meet the skill enhancement needs of our employees. A variety of employee growth mechanisms have been designed, establishing three career development pathways in administrative management, business management, and professional technology. All employees can choose their preferred pathway based on personal preferences. During the reporting period, all employees underwent regular performance and career development assessments. To alleviate the pressure of the shortage of international talents faced by the Company and to increase the reserve of such talents, we partnered with ETS (Educational Testing Service) TOEIC Test China Management Center, and together with the existing internal Company learning platform, we provided employees with a series of courses on foreign language proficiency

and international exchange, as well as foreign language ability testing services. These are designed to enhance employees' language skills and help them obtain internationally recognized certifications of their language abilities.

Encouraging employees to pursue continuing education and obtain various professional qualifications, we provide financial support to facilitate their endeavours. Internally, the Company has also devised a range of training and development plans tailored to different types of employees, fully leveraging their individual value. During the reporting period, our per capita training expenditure reached RMB1,020, with 37,041 external training sessions and 27,841 internal training sessions organised. The average duration of professional development training received by male and female employees was approximately 29.98 and 30.29 hours, respectively.



Global Employee Professional Workshop Completion

#### **Comprehensive Employee Development Pathways**

Target group	Development focus	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.
e B≡= New employees	We allocate dedicated business mentors and career coaches to new employees, follow up on the "Run- up Programme" with new employees and provide on- site learning opportunities in frontline units, which not only improves their operational capabilities but also familiarises them with our 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
Localised talents	We are dedicated to cultivating the management and professional technical abilities of our localised staff, providing them with increased opportunities for career advancement. We fully integrate them into Zijin's global talent development system, fostering a sense of belonging and cultural identity.	Headquarters training for foreign employees

During the reporting period, we collaborated with a third party to build the digital staff training and learning system iLearning, an online learning platform, which was launched and applied across the entire group. The platform enabled employees to undertake online training, covering various business scenarios to meet the ongoing learning needs of all employees. It offered over 200 specialized courses across 13 series, including foreign language learning, mining majors, predeparture training, safety and environmental management, ESG, and human rights. During the reporting period, the total number of iLearning online learners reached 13,679, accounting for 24.76% of the Group's total workforce, with a total learning time of 271,497.81 hours and an average of 19.85 hours completed per person.

During the reporting period, the Company increased training investments, continuously conducting regular training projects such as elite youth talent boot camps, top-performing graduates' training programme, corporate manager mining professional training, and artisan training, with an average satisfaction rate of over 93% for the annual training projects.

We continue to strengthen the training and selection of local management talents for overseas projects, accelerating the integration of local staff into Zijin's global talent training system. During the reporting period, we selected six local management talents from overseas to join the Group's elite youth talent training programme. Sixty-eight talents shortlisted for the "Eaglet Plan" received corresponding promotions, with a promotion rate of 61.3%. While intensifying the introduction of international talents and configuring local employees for overseas projects, we will pay more attention to the integration and joint development of localised employees, enhancing their identification with Zijin culture. During the reporting period, we invited 43 outstanding local employees from 12 projects across 9 countries to the Groups' headquarters for training to improve their sense of identification and belonging to the Group.

# **Future Plans**

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Continue to build and improve a global diversified talent recruitment and employment system, optimize talent structure, deepen the functionalities of international talent recruitment and deployment centers, clarify the recruitment responsibilities of subsidiaries in their respective countries, and increase efforts for localised talent recruitment, with a focus on cultivating local talents and management personnel in the territories of key projects.

Strengthen the creation of a diverse and inclusive workplace culture to foster a positive employment environment.

Implement a comprehensive remuneration and benefits plan to ensure stable growth in overall employee salary levels.

Integrate ethical conduct into the evaluation of employee promotions, employing the veto based on moral character.

#### **Employee Training**

By position	Number of employees trained	Training ratio(%)	Average training (hours)
Upper-level employees	641	93.74	27.86
Mid-level employees	2,653	96.39	30.40
Entry-level employees	41,714	97.46	29.15

• Expand coverage of the employee stock ownership plan to improve retention rates.

Accelerate the construction of training systems for local employees in each country, further integrate local employees into the company's training system, and better focus on their skills enhancement and career development.

# **Occupational Health and Safety (OHS)**

# Governance

The company has established a Safety Production Committee chaired by the President, serving as the highest decision-making and deliberative coordination body for occupational health, safety production, and public security and fire management, with an Executive Director and Vice President assigned to oversee safety production and occupational health work. The committee has an office, the Emergency and Safety Production Department, which acts as the administrative department to provide comprehensive supervision and management of the Company's safety production work. Each mining and smelting unit has established a safety management organisation and is staffed with full-time safety management personnel. Contractors bear independent safety production responsibilities based on project contracts and safety production management agreements and are incorporated into our integrated safety management system.



#### Zijin Mining Occupational Health and Safety (OHS) Governance Structure

Note: The scope of safety data is the employees and contractors of the production enterprises under the control of Zijin's operation, and the data of single employees or contractors will be specially indicated.

# **Risk Management**

# **O** Risk Identification

Zijin Mining is currently engaged in eight major production businesses, including geological exploration, mine exploitation, smelting and processing, engineering construction, transportation and logistics, hotel properties, new energy and materials, and environmental photovoltaics. The main safety risks are concentrated in mine exploitation, smelting and processing, and engineering construction. Our projects are distributed across multiple countries globally, increasing the difficulty of unified management. Additionally, as several of our mines extend deeper, risks such as steep slopes, high stress and ground pressure, high temperature and humidity, and altitude sickness are becoming more prominent.

#### Main risks and management measures for mining companies

Business Category	Risk hotspots	Risk	Risk management measures
Open-Pit Mine	Open-pit slope	Collapse	Regularly conduct slope stability assessments and establish slope displacement early warning and emergency response systems
	Dumping ground	Collapse, striking by objects, falls from height, vehicle injury	Implement scientific dumping management strategies, strengthen protective systems, and enhance safety training
Underground Mine	Mine surrounding rock	Roof-falling and rib-spalling	Scientific excavation design and stress management, and implementation of standardised tunnel support and maintenance
	Mine ventilation	Poisoning and suffocation, heatstroke	Install air monitoring equipment and keep ventilation systems in good operation and maintenance
	Lifting transportation system	Lifting accidents, vehicle injuries	Regularly inspect, maintain and upgrade equipment, and strengthen operator training and management
Other high- risk process systems	Civil explosives	Blasting, gunpowder Explosion	Standardised and enforce strictly management of the storage and use of civil explosives, and the construction of storage facilities that are safe and compliant with regulations
	Tailings storage facilities	Dam Failure, flood over- topping, blockage or damage to flood discharge facilities	Please refer to "Tailings Storage Facilities " section for details

We have established a hidden danger management model that consists of identification, rectification, and re-evaluation of significant risks to act as the ultimate barrier against any risks that have not been adequately identified. During the reporting period, we conducted safety management system assessments or key inspections on major subsidiaries. For the 705 risks identified, we individually confirmed the person responsible for rectification, specified corrective measures, allocated funds for rectification, set deadlines for correction, and pushed for comprehensive rectification closure through a contingency planoriented approach.

# **O** Risk Management

We focus on systems and links that are prone to risks and accidents and, in combination with seasonal characteristics, collaborate with internal and external experts to organize quarterly safety inspections. These include special inspections for flood season safety, lightning protection safety, vertical shaft construction, lifting equipment and facilities, tailings dams, and contractor safety management. The inspections emphasize the conformity of production sites with regulations and standards, safety facility design, construction organisation design, and specific construction plans. Adhering to risk control planning principles and following the principles of "elimination, prevention, reduction, isolation, personal protection, warning", we comprehensively investigate and rectify hidden risks.

To this end, we have taken measures in engineering technology, safety management, safety training, personal protection, monitoring and early warning, and emergency management. Promoting the substitution of mechanization for manpower, reduction of staff through automation, and advancement of intelligent unmanned operations are key strategies aimed at ensuring the safety and health of our employees.

In response to the specific risks associated with the increasingly prominent deep mining identified during the reporting period, we leveraged more than a dozen mining and metallurgy research units owned by the Company. Through targeted scientific research and engineering technical optimization (for details, please see the "Technological Innovation" section of this report), we effectively controlled the specific risks brought by deep and plateau mining. Continuous improvements in unmanned machinery have also enhanced the inherent safety of our mines.

# **O** Risk Monitoring

We maintain periodic identification of risk factors across all production enterprises through supervisory safety services. Safety supervision provides supportive services for the safety management of subsidiaries, with internal safety experts conducting assessments and key inspections of safety management systems, offering feedback on existing issues and suggestions for improvement. The frequency of assessments and inspections is determined based on the safety risk level of the enterprise.

In the day-to-day operations at subsidiaries, risk management mainly occurs through internal periodic inspections. Combined with the identification of risk factors during non-routine operations, a continuously updated and improved internal risk ledger is formed and sustained risk management is carried out.

During the reporting period, we established a Safety Monitoring and Emergency Dispatch Center, connecting 8,334 key location safety surveillance videos from 40 major operating mines and smelting enterprises, achieving integrated linkage and control over hazardous operations, important equipment and facilities, and main risk sites. The online monitoring system for the slopes of major open-pit mines has been uniformly integrated into the Safety Monitoring and Emergency Dispatch Center, enabling real-time dynamic monitoring and early warning for slopes. The gradual promotion of personal equipment such as surveillance spheres, law enforcement recorders, drones, and smart safety helmets at subsidiaries enhances our capability to monitor and control risks.

# **Strategy and Management Approach**

We are committed to building a safety management system that is highly compatible with our international development, establishing a production safety responsibility system covering all employees and regulations covering all businesses, guiding all employees to participate in safety work on their own initiative, realising independent management by all employees according to the system, and making continuous improvements.

# ○ OHS Management System

We have established an OHS (Occupational Health and Safety) management system based on ISO 45001 and have been continuously building and obtaining certifications for this system at all mines and smelters. We also integrate contractors into the Company's unified OHS management system, conducting entry reviews and process assessments on the contractors' safety qualifications, team quality, and on-site management. We encourage contractors to report and analyze minor incidents, optimizing operational processes and management to prevent major accidents. Zijin Construction Group was established to actively explore mining engineering self-operation and general contractors' safety risk.

We continuously pursue ISO 45001 health and safety management system certification at all production and operation points. As of the end of the reporting period, our certification coverage rate based on the operational points of the year 2020 has reached 97.5%. Our subsidiary Norton is currently developing and seeking certification for a Mine Safety Management System (MSMS) in compliance with the host country's regulations. In the future, we will require all production and operational units to obtain ISO 45001 certification or other safety management certifications that are not lower than this standard within three years of being effectively controlled by Zijin Mining.



# **OHS** Training

Inadequate training is the greatest hidden safety hazard; we insist on conducting continuous occupational health and safety training before and during employment and ensure that all employees and contractors possess complete occupational health and safety knowledge through assessment. To embed safety concepts deeply, we also launched the "Zijin Safety School" online learning system, compiled self-study manuals and courseware to enable employees to learn occupational health and safety knowledge online anytime. Additionally, we periodically carry out occupational health knowledge promotion and activities to continuously raise safety awareness among staff.

During the reporting period, the Zijin Safety Skills Training Center established comprehensive teaching and training regulations and systems, gradually equipped with and perfected the "theory + simulation + practical operation" safety training and examination equipment. Fujian Province's first practical examination for special mining operations was successfully held at the Zijinshan Gold and Copper Mine practical examination site. To convey safety knowledge to trainees in a more visual, vivid, and convenient manner, the training center developed the latest safety animation videos, accident case animations, and various online safety training courses. Combined with the "Zijin Safety Training Center" WeChat public account, which pushes daily safety production knowledge and relevant industry messages, the center continuously outputs the Company's safety philosophy, policies, and measures.

To make more efficient use of the training facilities of the Safety Skills Training Center, we established a safety consultancy company based on existing personnel and equipment. Throughout the year, we organised 35 sessions of "Three-Positions"<sup>1</sup> safety training, totaling 1,103 people in theoretical training and 333 in practical training. In cooperation with the local government's emergency management bureau, we held 75 certification examinations, with 2,376 people participating in the theoretical exam and 208 in practical tests.

	Data				
Type of training	Quorum	Person-times	Total hours		
Safety training for new employees	11,492	13,032	562,863		
Safety training for new contractors	41,357	49,040	1,966,553		
Safety training for current employees	42,111	969,813	877,946		
Safety training for current contractors	33,459	243,685	571,968		

# **© Employee Health**

The health of all employees, including contractors, is regarded as one of the core elements of daily management. We are committed to establishing and maintaining a risk-controlled, safe, and healthy working environment for all staff and contractors. The risks of occupational diseases affected by internal factors and the risks of infectious diseases

influenced by external factors are managed in an integrated manner. Through routine attention to employee health and regular medical examinations, we can promptly detect changes in employee health conditions, and then provide necessary care measures, such as health advice, medical assistance, or emergency referrals.

#### **Occupational Health Management**

We adhere to the core occupational health management policy of "prevention first. combined with treatment and control", committed to preventing and minimising work-related health impairments and ensuring the safety and health of the working environment for employees and contractors.

Guided by the OHS risk management system, the occupational health management system begins with the declaration of occupational disease hazard projects and the "three simultaneities" of occupational health protection facilities for construction projects (occupational safety and health facilities are designed, constructed, and put into operation simultaneously with the main project), creating a work environment and conditions that meet national occupational health standards and requirements from the source. For existing risk factors, we leverage continuous innovation in technology and processes to reduce exposure to risks, ensuring risk control through ongoing risk identification and analysis.

In operations, we focus on dust prevention, poison prevention, and noise protection, incorporating new occupational hazards, such as unhealthy work practices and job stress, into our daily management.

At the same time, we provide all employees exposed to occupational health risks with periodic occupational health checkups and comprehensive health support services, including health monitoring, emergency medicines, medical insurance, chronic disease health support, on-site first aid, and psychological health counseling. During the reporting period, nine subsidiaries were awarded the title of "Healthy Enterprise", committed to building a solid foundation for the health of all employees.



Note:1.The "three positions" refer to the main person in charge of the production and operation unit of the enterprise, the safety management personnel and the special operators; these three categories of personnel are subject to a safety qualification access system, and must be trained, assessed and qualified, and must obtain safety qualification certificates or operating certificates for the special operators before they are allowed to be licensed to take up their posts and undergo regular retraining.

## Periodic health check-ups

- **Before taking up a position:** Through symptom inquiry, physical examination, laboratory tests, and other assessments, we screen for any occupational contraindications to reduce health risks.
- **During employment:** The frequency of health check-ups is determined based on the type of work, position, and occupational health risk factors, ranging from once in one or two years.
- Upon departure: Employees undergo a special medical examination before vacating a position or job that involves exposure to occupational disease hazards, to determine whether their work experience has led to any occupational hazards.

Due to the construction of some of our projects in high-altitude regions, during the reporting period, we have identified altitude sickness as a new employee health risk that requires attention. At all high-altitude projects, we have equipped with sufficient oxygen supply equipment to reduce discomfort caused by hypoxia. Management and treatment mechanisms for altitude sickness and high-altitude illness have also been established to minimise the risk as much as possible.

During the reporting period, we conducted re-detection and re-assessment of occupational disease hazard risk factors at subsidiaries. For all confirmed occupational hazards that could not be mitigated to acceptable levels through management measures, we formulated specific technical optimisation plans. Our aim is to achieve the target of zero exceeding of occupational hazard factors across all enterprises and maintain the goal of 100% coverage of occupational health examinations for employees exposed to occupational hazards.

#### Mental Health Support

In the mining production industry, our employees often face considerable psychological stress due to high work pressure and challenging tasks. To ensure the mental and physical health of our staff, we have implemented a variety of initiatives, including setting up counseling centers, various mental health training programs, seminars, and opportunities to consult with professional counselors, aimed at fostering and sustaining employees' psychological adaptability and resilience. Our employee mental health strategy is designed to prevent and alleviate workrelated stress and reduce the impact of mental health issues on employees and their families. By enhancing the overall mental health of our workforce, we also aim to minimise the risk of errors at work and promote higher business performance.

#### Management of Infectious Diseases

The safeguarding of our employees' and communities' health and well-being serves as the central objective of our infectious disease management. The Company adheres to the "International Health Regulations", pertinent legislations of the host country, and various recommendations set forth by the World Health Organization (WHO), having established an infectious disease management system grounded on health information reporting and emergency management. This system is tailored to address the principal infectious disease risks faced by each project.

At the beginning of the reporting period, some of our projects underwent significant disruptions due to multiple strains of COVID-19 such as BF and XBB. Nevertheless, owing to the resilience of our infectious disease management mechanisms, coupled with a high vaccination uptake amongst our staff and a robust stockpile of pandemic supplies, the operations of our projects remained largely unaffected. We continue to monitor the enduring impact of this outbreak on individual employees' health with sustained concern. In May 2023, Dr. Tedros Adhanom Ghebreyesus, Director-General of WHO, announced that COVID-19 no longer constitutes a Public Health Emergency of International Concern (PHEIC). Our infectious disease management system transitioned from emergency to routine mode following this announcement while still maintaining close vigilance over COVID-19.

In addressing malaria, another infectious disease of long-term attention and prevention, we have adopted the professional recommendations on malaria prevention technologies in the "Global Technical Strategy for Malaria 2016-2030".

Measures taken in malaria-endemic areas include Indoor Residual Spraying (IRS), Reactive Case Detection and Treatment (RACDT), among others, to continuously mitigate the threat posed to employees and the community. Medical facilities in the mining area have been expanded, with reserves of malaria medication and a refined medical emergency referral system put in place to ensure timely medical assistance for all employees and the neighboring community in case of infection. We also take note of the additional health protection provided by the WHO-recommended malaria vaccine and the gradual elimination of malaria by more countries, anticipating a decrease in the risk of malaria for our employees and the community in the future.

Ongoing vigilance over infectious diseases such as monkeypox, HIV, and cholera is maintained, embracing the caring and non-discriminatory approach suggested by WHO and health agencies of the host country. Feasible assistance is offered to all stakeholders.

In light of the recommendations and warnings in the report submitted by the WHO Director-General to the 76th World Health Assembly, we will keep abreast of public health surveillance outcomes from WHO and the Centers for Disease Control and Prevention of the host country. We will adjust the response levels of our infectious disease management as needed, learning from the COVID-19 pandemic response experiences and lessons, to be fully prepared for the potential outbreak of the next pandemic. Our utmost effort will be deployed to protect the health and well-being of our employees and surrounding communities.
Employee Development | Occupational Health and Safety (OHS) |

## **© Emergency Management**

Despite the comprehensive Occupational Health and Safety (OHS) management system in place to minimise the probability of accidental incidents, we still maintain a high standard of response capability for any emergencies. We require all mines to form top-tier mine emergency rescue teams endowed with a wealth of professional knowledge. These teams are equipped with multiple emergency rescue professionals and apparatus, and they routinely receive capacity training and conduct drills to address various sudden situations. During the reporting period, we have successfully detected and responded to 2,348 different emergencies.

At present, we have completed the construction of emergency response systems in 59 enterprises, with 816 emergency response plans tailored to different events, and have built several professional emergency rescue teams, comprising 41,580 parttime and full-time staff equipped with varying levels of emergency response capabilities. Technical experts in infrastructure, machinery, electricity, and chemistry are also ready to be dispatched for rescue missions as needed. Relying on the heavy vehicle equipment of the mines and our multi-level institutional duty system covering all subsidiaries, we have formed a capacity for 24-hour global emergency responses throughout the year. We are equipped to professionally handle a range of internal emergencies such as mine accidents and tailings dam failures, as well as external events including natural disasters like earthquakes, floods, and community incidents.

Since the construction began in the previous reporting period, the National Mine Emergency Rescue Fujian Team has been established, with 145 members equipped with various types of advanced rescue devices, and is on 24-hour standby to ensure the Mine Rescue Fujian Team can handle multiple mine emergency rescue operations concurrently. The construction of the mine rescue team base has commenced according to plan, with completion expected by the end of 2024.

While maintaining the advanced equipment of our emergency teams, we also place high importance on enhancing the professional skills of the emergency personnel. During the reporting period, we conducted 3,996 realistic emergency drills covering all our operational projects, with 79,953 employee participations. These drills encompassed various types of emergency situations including fire emergencies, tailings accidents, and first aid for injuries.

During the reporting period, our emergency rescue teams actively participated in various emergency skills competitions. Several subsidiaries, such as Norton and Continental Gold, have won multiple awards in national-level emergency rescue skill contests.

# Hunchun Zijin resumed production quickly in response to emergency floods

In mid to late August, influenced by Typhoon "Kanu" and the northward movement of the Jianghuai cyclone, nearly twenty days of continuous rainfall led to water saturation in the soil surrounding Hunchun Zijin. Beginning from 12:00 pm on August 28th, the mining area initiated a flood prevention emergency response in accordance to the meteorological conditions, reinforcing surveillance and inspections of key areas such as the open-pit mining sites, tailings storage facility, level-three defense structures, Hunshui River culvert bridges, and mine residential areas. Fifteen heavy machinery vehicles were dispatched and placed on standby in various sectors. The intense rainfall that started in the early hours of August 29th triggered flash floods, causing a complete halt in mine operations and inflicting severe damage on flood prevention infrastructure and other critical parts of the mine. The level-three defenses system's Xiangfang River watergate was completely washed away, and parts of the road from the mining area to Chunhua town were destroyed and impassable. Benefiting from Hunchun Zijin's early prevention and control, multi-stage defence measures were successfully taken against the incoming floods. Based on various emergency plans, engineering vehicles conducted real-time reinforcement at each disaster site. Ultimately, the integrity of the tailings dam, the main bridges and culverts connecting the mining area to the external highways, and the safety of the employees were successfully secured. This greatly minimised the impact of the floodwaters on downstream communities, rivers, and the company itself.



Flood Emergency Response

## **O Hazardous Chemicals Management**

We have established the "Hazardous Chemicals Safety Management Code", which comprehensively stipulate the safety management of all hazardous chemicals, especially cyanide, throughout procurement, transportation, production, storage, and usage. We also adhere to the "<u>Minamata Convention</u>" on Mercury, eliminating the use of mercury in gold extraction across our entire operations and supply chain.

Utilising sodium cyanide solution to extract gold

from ore is currently the safest and most effective method. However, any improper handling of cyanide could pose a significant threat to our employees and stakeholders. In the management of cyanide, we have referred to the advanced management concepts of the "International Cyanide Management Code" and have extended it to the management practices of all hazardous chemicals. During storage, we implement a "five pairs" system where two persons independently and simultaneously engage in five key processes receiving, custody, dispatch, locking, and accountingto ensure that all operations steps are cross-checked and mutually confirmed. During usage, we have compiled comprehensive work instructions and standard operating procedures, requiring employees to strictly follow protocols and wear prescribed personal protective equipment. In procurement, transportation, and post-treatment stages, we adopt a responsible attitude, committing to the strictest controls over the entire lifecycle of cyanide to prevent negative impacts on our employees, surrounding communities, natural environment, and other stakeholders. In all workplaces involving hazardous chemicals, especially cyanide, we are equipped with professional safety and emergency equipment, and have provided the emergency response team with targeted training for hazardous chemical cleanup and disposal.

During the reporting period, the Company has not experienced any incidents related to cyanide or other hazardous chemicals, such as leaks, occupational hazards, or environmental pollution. Employee Development | Occupational Health and Safety (OHS) |

### ○ Intelligent Mine for Better Safety

We continuously optimise and upgrade our comprehensive safety platform and the Zijin Safety Academy. Regarding the comprehensive safety platform, we have further refined and perfected modules such as process safety control, contractor management, and integrated safety management, gradually achieving proceduralisation and standardisation in key security management business processes, moving towards digital and lean management control. As for the Safety Academy, while maintaining the functionality of the original version, we have carried out a complete functional upgrade design and preliminary preparations in accordance with the mandatory industry standard "Basic Conditions for Safety Production Training Institutions", which sets forth requirements for safety training platforms. Both information systems focus on improving the safety of critical facilities at important stages, enhancing employee engagement, and continuously providing safety production support to all subsidiaries.

In our subsidiaries, we adapt our approaches according to the geological and equipment characteristics of each mine, specifically through process and equipment improvements to reduce safety risks and enhance safety guarantees. For instance, Guizhou Zijin, a subsidiary of the Group, optimised its mining method, transitioning from room-and-pillar to cemented fill mining, achieving centralised safety in production. For thin ore bodies, customized intelligent low-profile mining equipment was developed; currently, small intelligent jumbos, remote-controlled drill rigs, compact remote-controlled loaders, and small remote-controlled rock loading machines are being used in narrow section operations, realising remote visual operation, which reduces safety risks and enhances production efficiency.

## Indicators and performance

During the reporting period, the number of fatal accidents and fatalities occurring in normal production processes was significantly lower than the average of the previous four years. Moreover, despite the sustained growth in the output of major mineral products, the number of fatalities per hundred billion in revenue continued to show a downward trend. However, it is with deep regret and sorrow that we report multiple accidents within our mining operations, resulting in the deaths of 10 contractor employees and 1 in-house employee. This outcome is a considerable deviation from our "zero fatalities" goal and the integrated management policy for contractors. For each accident, we conducted thorough analysis using the Comprehensive Analysis Chart of Accident Roots or the 5W Analysis Method, to extensively identify safety management system gaps and deficiencies in safety culture highlighted by the accidents. To comprehensively improve the Company's safety management system and effectively enhance safety performance, we have launched the "Three-Year Action Plan for Safety System Enhancement", which entails an overarching upgrade of the safety management system.

During the reporting period, we further increased our investment in safety to RMB2.804 billion. In the future, we will continue to strengthen investment in safety protection facilities, hazard rectification, safety education and training, and other projects to support the successful achievement of the goals of the "Three-Year Action Plan for Safety System Enhancement".

### Le Underground Personnel Positioning System at Serbia Zijin Copper's JAMA Mine

The JAMA Copper Mine operated by Serbia Zijin Copper, located approximately 1.5km from the urban area of Bor, is an underground copper mine. To more accurately monitor the underground environment and the operation of production equipment, enhance safety for mine workers, and reduce the difficulty of coordinating safety management with production, Serbia Zijin Copper has established an underground personnel positioning system for the JAMA Mine. Utilising personal positioning devices with electronic tags, the monitoring center staff are able to track and monitor the real-time locations of underground workers, manage attendance, provide one-touch SOS, and offer two-way communication through their display screens. This system enables management to promptly grasp the distribution of workers' locations underground, thereby improving the efficiency of managerial dispatch and emergency rescue operations. It effectively creates a real-time simplified digital twin of the underground work conditions, adding a new layer of protection to the occupational safety of all employees.



Indicator	Unit	2023	2022	2021	2020
Number of employee fatalities	Person	1	1	4	0
Number of contractor fatalities	Person	10	2	4	2
Lost days	Day	9,503.00	12,940.00	2,540.75	5,909.50
Lost work hours rate per million hours worked <sup>1</sup>	/	311.33	494.38	105.62	328.35
Lost time injury rate per million hours worked $(\text{LTIR})^2$	1	0.25	0.29	0.30	0.33
Total recordable incident rate per million hours worked $\left( \text{TRIR} \right)^3$	/	0.91	0.64	0.68	0.69
Near miss frequency rate per million hours worked <sup>4</sup>	1	0.88	0.14	0.18	0.07
Total number of hours worked	Million hours	244.18	209.39	192.44	143.98

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Lost work hours rate = Lost work hours due to work-related injuries ÷ Total number of hours worked x 1,000,00

2. Lost time injury rate (LTIR) = Number of persons with lost time injury  $\div$  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 1,000,00

4. Near miss frequency rate (NMFR) = Number of near misses  $\div$  Total number of hours worked x 1,000,000

Employee Development | Occupational Health and Safety (OHS) |



## Investment in Production Safety

## Julong Copper 5.14 Fall Accident Reflection

- Accident Overview: On 14 May 2023, during the construction of the emergency escape vertical shaft for the drainage adit project at the Julong Copper Polymetallic Mine, our contractor experienced a malfunction in the main hoist, which led to personnel being trapped underground. In the ensuing rescue operation, which involved using a drilling winch to bring six individuals up from the mine shaft in one go, a material defect in the reduction gear's turbine resulted in tooth fracture from fatigue, cutting off the drive chain. At an elevation of approximately 300 metres, the wire rope, along with the basket carrying the six individuals, continued to descend under the force of gravity, culminating in a severe vertical shaft falling accident claiming the lives of six workers.
- Emergency Response: Immediately following the incident, Julong Copper reported to the local County Emergency Management Bureau and commenced a full-scale cessation of construction and production to spearhead the search and rescue efforts. A comprehensive self-review and selfcorrection were performed for all the vertical shafts and lifting equipment under the company's jurisdiction.
- Improvement Measures: To fully enhance the Zijin safety management system, the Company entered into a technical service contract with the China Occupational Safety and Health Association and initiated a three-year action plan to elevate the safety management system. The Company is set to form a specialised group of experts to conduct health checks and consultations for vertical shaft construction and the shaft hoisting system. This team will undertake a complete safety inspection and diagnosis of the 72 hoisting systems across all subsidiaries, and establish strict standards for vertical shaft construction and operation, inspection, remote supervision, and an informationalised supervision system, to forestall the reoccurrence of similar accidents.

## **Future Plans**

We are committed to the belief that "the right to life" is the paramount human right, comprehensively improve the safety management system, thoroughly reverse the passive situation of mining construction projects, and strive to achieve the goal of "zero work-related fatalities".



In response to the temporary and phased characteristics of construction projects, strengthen safety management and tighten the entry requirements for personnel, equipment, operations, and contractors.

Learn and implement the advanced safety management experience of outstanding subsidiaries, incorporate contractors into the Company's safety management system as a fundamental work requirement, and fully implement the "front-line work method" and "safety points system".

Strictly enforce the accountability and punishment system for production safety accidents.



# Community

Many mining projects are located in developing countries or regions, where mining activities often represent a principal economic source for local communities. The taxes, employment opportunities, and improvements in community infrastructure resulting from mining can significantly enhance the living standards of community residents. Zijin Mining upholds the principle of "Mining for a Better Society" and, in alignment with the United Nations Sustainable Development Goals (SDGs), integrates the philosophy of "Value Creation and Common Development" into every facet of its operations. We operate in a responsible manner, and while achieving corporate profitability, it actively shares development outcomes with the community, elevates the local economy, and enhances the production and living standards of community residents, thereby fostering the sustainable development of communities where we operate.

## Governance

Zijin Mining's community strategy is centrally planned and coordinated by the Strategic and Sustainable Development (ESG) Committee under the Company's Board, with the ESG Management Committee being responsible for its implementation. The community management work of each subsidiary is governed by a system where the general manager is held accountable, and a dedicated community work department has been established. This department is staffed with professional community staff responsible for daily activities, including community engagement, charitable donations, and the execution of community development projects. To ensure community concerns are directly conveyed to the Company's management, we require general managers of our subsidiaries to regularly visit communities and communicate face-to-face with residents, thus directly engaging in frontline community work.



Zijin Mining Community Governance Structure

## **Risk Management**

Effective community risk management and garnering community support are fundamental to ensuring stable and sustainable corporate operations. To counteract the operational risks that may arise from community issues, we have developed a series of policies, standards, guidelines, mitigation measures and procedures, and established an ESG management platform for real-time monitoring and management. The Company's headquarters can track subsidiary community risk changes in real time through this platform and supervise the effectiveness of the implementation of mitigation measures.

We actively engage in communication with stakeholders and collect community complaints through various channels to help us identify community risks. In 2023, we researched and designed a unified risk identification matrix and required all overseas subsidiaries to employ this matrix to identify community risks. The community risks identified in 2023 were mostly associated with the mining activities, including community safety, resettlement of immigrants and community human rights issues, community health concerns (noise, dust, and blasting), and damage to community infrastructure, among others. Here are the main community risks we identified:



Community Safety Talk at Río Blanco

# Community Safety

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Mining is a high-risk industry, and inadequate safety management can pose significant risks not only to our employees but also to the community. On one hand, should an accident occur in critical areas such as tailings storage facilities or slopes, it could directly threaten the lives of community residents. On the other hand, a very small portion of illegal mining activities may be accompanied by crimes such as armed conflict, drugs, and violence, which threaten community safety. For more information on related management measures, please refer to the "Safety" and "Human Rights" chapters.

### **Resettlement and relocation**

Mining development may involve the relocation and resettlement of residents. For affected families, particularly those who rely on agriculture, resettlement and relocation can harm their economy and livelihoods, leading to land use disputes. In projects that involve indigenous peoples, relocation can even influence their cultural heritage, traditions, and way of life.

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### **Community Human Rights**

Mining activities may pose potential risks to the human rights of communities. Poorly made decisions due to a lack of communication with the community can lead to disputes that often infringe on the human rights of community residents. Additionally, mismanagement of security personnel can result in violent confrontations with community members, thereby violating their human rights. For further discussion on the protection of community human rights, please see the "Human Rights" chapter.



#### **Community Health**

Mining operations commonly involve drilling, blasting, and other activities that can affect the environment and the normal lives of community residents due to noise and dust. The emissions from mineral processing and smelting can pollute community water, soil, and air. Furthermore, some projects inherited significant pollution issues before acquisition, which could pose enormous risks to the community if not properly addressed. For more details on environmental management measures, please see the "Our Planet" chapter.



A market donated by COMMUS for the community is delivered for use

## **Strategy and Management Approach**

Zijin Mining's community work strictly adheres to international norms and standards such as the "United Nations Global Compact's Ten Principles" and the "Responsible Gold Mining Principles" (RGMPs), and integrates the United Nations Sustainable Development Goals into our community performance metrics. In our engagement with indigenous peoples and during the process of resettlement, we follow international norms and standards including the United Nations Food and Agriculture Organization's "Free, Prior and Informed Consent (FPIC): A Practical Guide for Governments, Companies, NGOs, Indigenous Peoples and Local Communities in relation to Land Acquisition", the International Labour Organization's "Convention No. 169", and the "United Nations Declaration on the Rights of Indigenous Peoples", thus conducting our work in a manner that respects human rights.

Our "Social Responsibility Policy" and "External Donation Policy" standardise community relationship management for various operational projects. In 2023, the Company established the "Community Management Policy" specifying the fundamental principles and detailed implementation rules of community management work, ensuring that subsidiaries conduct community management in a more regulated and responsible manner.

We recognise that mining activities can impact local communities; thus, operating in host countries requires not only legal permission but also a "social licence" from the local community. This means that we must go beyond merely meeting the requirements for legal and compliant operations, and work to reduce the negative impacts of our operations on the community, ensuring that the community benefits from the development of mining. On one hand, we continue to increase transparency regarding community information, striving to gain community trust. On the other hand, we actively implement various community development and philanthropic projects, support local industries, promote community employment, improve residents' living standards, and proactively share the fruits of development with the communities of the host countries to achieve shared growth.

### O Community Communication and Engagement

Maintaining positive community-corporate relationships is one of the necessary conditions for our sustainable operations. A company can acquire a "social licence" by mitigating actual or potential socio-economic and environmental risks and impacts. This includes preventing violations of human rights and indigenous peoples' rights, minimising involuntary resettlement, and mitigating adverse effects on community health, cultural heritage, and livelihoods. Hence, we place much emphasis on the voices and demands of the communities, establishing a framework for community engagement and communication. Subsidiaries annually conduct various forms of communication and engagement activities according to this framework, including mine open days, villagers' meetings, and media briefings, proactively inviting the community to understand the operations and ESG work of the enterprise, to listen to the residents' expectations, and to establish an equal, constructive, and positive dialogue. This enhances the transparency of the projects and gains community trust. During the reporting period, we held a total of 816 community meetings and received 24,658 visits from stakeholders.

We adhere to the UNGP criteria for assessing the effectiveness of grievance mechanisms, regularly reviewing the effectiveness of our communication and complaint mechanisms. We gather opinions from stakeholders who use our grievance mechanisms, develop improvement plans, and promptly report progress to them, fostering a positive and efficient two-way communication and feedback mechanism. The community can express its complaints and grievances through our transparent communication and complaint mechanisms, and we promptly respond to the expectations and demands of stakeholders, and strive to resolve issues through legal and reasonable means. During the reporting period, we received and responded to 396 new community complaints, achieving a response rate of 100%, and resolved 390 complaints (including unresolved historical grievances), with a total complaint resolution rate of 98.5%. The complaints received in 2023 were primarily related to community property damage, environmental issues, and resettlement.



#### Grievance Reports from the Communities

# Serbia Zijin Copper's community communication mechanism

### a Serbia Zijin Copper community coordinator

"In reality, most community issues arise due to asymmetrical information. Actively engaging with and integrating into the community, truthfully and promptly informing them about the various aspects of the company's production and construction, valuing the community's interests and demands, and pursuing common development with the community are the keys to achieving long-term stability in community governance."

Prior to Zijin Mining's acquisition of the Bor Copper Mine, the project had serious environmental problems, causing long-term negative impacts on the surrounding community. Therefore, after Serbia Zijin Copper took over the project, the local residents are particularly interested in the company's environmental protection efforts and operational status. To enhance corporate transparency, Serbia Zijin Copper established a comprehensive community communication mechanism which utilises channels such as community service centres, press conferences, and open days to facilitate regular communication with the community and ensure full community participation.



Serbia Zijin Copper Majdanpek branch held media conference

#### O Establishment of the Serbia Zijin Copper Community Service Centre

The Serbia Zijin Copper Community Service Centre mainly handles community reception, information collection, inquiry responses, donation collection, and community complaint processing. The service centre has a dedicated community hotline, which logs and records all community affairs, managing them through a closed loop system. For impacts on the community caused by mining activities, the centre promptly reports and delegates them to the appropriate department for resolution.

# • Trilateral Coordination Meetings: Collaboration among the Company, Communities, and the Government

Serbia Zijin Copper has established regular trilateral coordination meetings involving representatives from the company, the local community, and the government where the project is located. These meetings serve as a platform to address community concerns and demands raised towards the company. With the government acting as a neutral third party, positioned in the public interest, it mediates community issues and actively resolves conflicts, ensuring the efficient handling of community affairs. This approach has garnered high praise from both the company and the community for its effectiveness.

#### O Community Open Days

On 27 April 2023, Serbia Zijin Copper held a community open day event where 70 community representatives from the village of Krivelj in Bor were invited to visit two of the company's copper mines. They engaged in extensive discussions with company management and municipal representatives on issues of community concern, such as land acquisition and resettlement for Krivelj village and future mining plans. During the reporting period, Serbia Zijin Copper conducted 35 community communication events and received 373 visits from the community.

## ○ Social Contribution and Community Development

Most of our projects are situated in countries or regions that face greater environmental and societal challenges, with local communities primarily involved in traditional industries. For these communities, mining resources are of critical importance to their development. We recognise that while mining development may have adverse effects on their traditional livelihoods, it can also bring development opportunities and improve the quality of life for residents. Therefore, we are dedicated to maximising the economic contribution in the

locations where our projects operate to mitigate risks associated with impacting community livelihoods. Zijin Mining has established a robust tax governance framework and an effective tax risk assessment and evaluation mechanism, paying taxes, royalties to host country governments in accordance with the law. By bolstering local fiscal revenue, we ensure that governments can carry out more extensive public welfare programmes, benefiting broader society to reduce inequalities.

#### **Economic Contributions**

Indicator	Unit	2023	2022	2021	2020
Direct economic contribution	RMB100 million	3,247.48	2,853.94	2,359.11	1,800.15
-Salaries and benefits paid to employees	RMB100 million	98.35	91.08	71.51	39.59
-Payments to suppliers	RMB100 million	2,854.44	2,511.41	2,106.53	1,635.57
-Community donations	RMB100 million	2.97	2.51	2.68	1.66
-Dividends distributed	RMB100 million	96.60	81.15	53.75	35.07
-Interests paid to creditors	RMB100 million	57.46	39.53	24.04	23.09
-Payments to government (tax)	RMB100 million	137.66	128.26	100.60	65.17
Total social contribution value	RMB100 million	561.83	509.04	394.83	214.09
Social contribution value per share	RMB	2.13	1.94	1.53	0.84

Zijin Mining fully listens to and researches the needs of local community residents, taking into account local social issues, industrial development, and employment market conditions. The Company implements "Teaching how to fish" development projects tailored to local conditions, including economic development, support for vulnerable groups, educational improvement, cultural and sports activities, environmental management, and enhancement of community health. These initiatives ensure that residents of affected communities can secure sustainable livelihoods, achieving common development for both the enterprise and the community.

We actively explore the potential for local characteristics and traditional industry development, offering training in business operations and cultivation to local farmers, aiming to elevate commercialisation and establish distinctive industry brands. In terms of local products, we prioritise local procurement to support local enterprises and help them integrate into our supply chain. During the reporting period, local goods and services procurement associated with our mining operations in host countries accounted for 80.3% of our total procurement expenditure (excluding raw materials purchases). Furthermore, we expand the sales channels for local specialty products through connecting with potential customers, collaborating with chambers of commerce, and participating in exhibitions. In addition, our local employment policy offers skill training and internships to community residents and local graduates, enabling them to meet our employment standards and providing them with job opportunities on a priority basis. During the reporting period, our local employment rate reached 95.85%.

During the reporting period, Zijin Mining invested RMB827 million in community development, of which RMB297 million was for philanthropic donations. Owing to its outstanding contributions in the field of philanthropy, Zijin Mining was awarded the highest governmental award in China's philanthropy sector the "China Charity Award" for donation enterprises.

Community Investment by Categories



■ Environment ■ Communication ■ Helping the vulnerable



### 🖺 🔄 Economic Development: The Revitalisation Path of the COMMUS Community

The area surrounding COMMUS encompasses four communities and four villages, where the overall condition of infrastructure is in poor condition, with unstable supply of electricity and drinking water, substandard sanitation facilities, and prevalent infectious diseases such as malaria and cholera. Residents primarily rely on artisanal mining, selling charcoal and agricultural products for their livelihood, which leads to low income and educational levels overall. To address these challenges, COMMUS has signed a "Community Project Charter" with neighbouring communities, aimed at enhancing the level of community infrastructure to meet the basic living needs of the residents. Additionally, in partnership with the local government and community, the DOT COMMUS fund was established, allocating 0.3% of annual turnover to the fund. During the reporting period, COMMUS invested USD2.2703 million to advance ten projects outlined in the "Community Project Charter," including the construction of an agricultural market, water wells, and electrical facilities. As at the end of the reporting period, a cumulative total of USD10.43 million had been invested into the DOT COMMUS fund by COMMUS.

Based on this, COMMUS has implemented various community projects, many humanitarian projects that benefit people's livelihood but were shelved due to infrastructure and financial issues were restarted. The summer camp project benefited over a thousand children from surrounding communities, effectively reduced the use of illegal child labour, and lowered the incidence of children's accidental injuries and deaths during the summer; the football tournament initiative provided a platform for twelve professional or amateur teams from the surrounding communities, businesses, and institutions to interact; the agricultural support programme annually donates 1,000 kg of corn seeds, 8,000 kg of fertiliser and urea each to the neighbouring villages, covering a total of 30 hectares of land, and offers agricultural planting technical training courses, which has enhanced the local corn yield. In 2023, Community Water Supply Improvement Plan installed a water supply system in Kabebe village, which will benefit nearly 20,000 residents once completed. The company also funded the repairs of the Jikamene water station and municipal water systems. The Water Supply Improvement Plan has significantly addressed the most urgent living needs of the community residents; women no longer need to walk for kilometres to find water sources, avoiding the series of diseases induced by drinking unclean water, thereby improving the

#### health and living standards of the residents.

In the future, COMMUS will continue to focus on the needs of surrounding communities, offering help and support in various areas such as infrastructure, sanitation, and education, and adjusting and refining its approach based on actual situations. In this way, the company's development will benefit more local residents and create a better community environment.



Economic Development: Río Blanco Copper's "Boosting Coffee Cultivation and Marketing" Project

Achieving social consensus is a prerequisite for mining development. For this reason, Río Blanco Copper in Peru continuously reviews the environmental impact of its projects, communicating the environmental viability of the project to the community to gain its support. During the environmental review process, Río Blanco Copper discovered that residents in the project area mainly rely on agriculture for their livelihood, with farmers exhibiting substantial demand for improving crop yields, crop quality, and commercialisation of agricultural products. Consequently, Río Blanco Copper launched the "Boosting Coffee Cultivation and Marketing" project, tailored to local conditions, aimed at enhancing the quality and quantity of local coffee and expanding its market.



The first phase of the project involved providing technical advice for fertilisation, supplying fertilisers to the farmers, and strengthening the connection between local coffee farmers and the international market to improve coffee sales. In the second phase, the project plans to assist coffee growers in obtaining financing at lower interest rates, constructing reservoirs, upgrading irrigation techniques, and improving coffee roasting and packaging processes.

The coffee project is the first initiative undertaken by Río Blanco Copper focusing on the development of family agriculture for local residents. It aims to increase their income and create more employment opportunities for the community.

### Economic Development: Rosebel Gold Mines (RGM) Agricultural Development Programme

RGM has collaborated with local fruit and vegetable suppliers and collaborated with community organisations to launch sustainable farming projects for community farmers. The programme aims to transform traditional agricultural practices into a sustainable agricultural industry, thereby fostering economic development in the regions where RGM operates.

The programme is led by local community organisations and comprises two sub-projects. The first is to build an agricultural products packaging plant for the community, promoting advanced processing techniques and enhance the mechanisation level of agricultural produce processing and meet the standards of RGM suppliers. The second is to train community farmers, guiding them in cultivating cash crops to increase agricultural production volume and quality, with RGM responsible for purchasing and boosting their income.

Since its inception in September 2022, the project has directly benefited 140 community residents, providing them with a more stable source of income, promoting sustainable development, and laying the foundation for future cooperation. Moving forward, RGM intends to expand the scope of the programme, continuing to collaborate with local governments, businesses, and organisational to amplify the project's influence and designing contingency measures to address the effects of uncontrollable factors.



### Community Health: Serbia Zijin Copper's "Health Guardian" Programme

The public medical facilities in the area where the Serbia Zijin Copper project is located are seriously underdeveloped, and the main medical institutions in the urban area lack professional surgical equipment. To improve the local medical situation, Serbia Zijin Copper launched the Zijin "Health Guardian" medical assistance project, applying for a special budget each year to improve urban and rural medical and health conditions and enhance the medical service and emergency rescue capabilities of major medical institutions in the city. Since 2022, Serbia Zijin Copper has successively donated urgently needed medical supplies such as new ambulances, professional surgical instruments, and disinfection equipment to major medical institutions in surrounding urban areas, effectively solving the problem.

The "Health Guardian" medical assistance programme also benefits the vast rural areas.



As there are more elderly people living in rural areas, there is a high demand for daily checkups and monitoring equipment for chronic underlying diseases. Serbia Zijin Copper has made phased donations of basic testing equipment such as electrocardiographs and blood glucose meters to several village clinics to improve their ability to detect and diagnose basic and chronic diseases such as hypertension, heart disease, and diabetes.

## Community Health: Serbia Zijin Mining "Healthy Drinking Water" Project

The communities surrounding Serbia Zijin Mining have long relied on wells for water supply. However, due to the historical disorderly development of the mining industry, there have been issues of heavy metal contamination in the soil and water sources, leading to the gradual depletion of villagers' wells and posing a serious threat to their health. To address this issue, Serbia Zijin Mining funded USD1.726 million to rebuild a 7.7-kilometre water supply network and facilities, providing the surrounding communities with access to tap water pipelines and ensuring that residents can obtain highquality, sustainable domestic water. The completion of this project has provided clean tap water to three communities around the mining area and approximately 10,000 people affiliated with the company, reducing the over-reliance on groundwater resources and improving the residents' health conditions.



### 🗒 Educational Improvement: Continental Gold's "Parent Classroom" Project

In response to the call of the "2023-2033 Municipal Education Plan" of the city of Buriticá, Continental Gold has collaborated with the Mayor's Offices of Buriticá and Medellín, the Social Organisations Foundation, and Saint Gema School, among other institutions, to jointly develop the "Parent Classroom" project. This initiative aims to provide advanced educational methods, information, and experiences to improve the educational concepts of families in surrounding communities and to assist in the healthy and positive development of young people.

In 2023, Continental Gold organised experts from various sectors of society and outstanding teachers to conduct a series of classroom activities, facilitating the exchange of experiences, reflecting on education, and guiding teaching methods on topics such as preventing the abuse of psychoactive drugs, strengthening family relations, and promoting children's healthy development. These activities have been widely implemented in the urban area of Buriticá, Chigorodó, and Naranjal communities, benefiting approximately 135 educational professionals. Parents and teachers have expressed their gratitude for the in-depth implementation of this important interactive project.



Zijin Mining' s Community Development Projects around the World



## O Relocation and Resettlement

Mining development may involve relocation and resettlement, and without thorough land planning and proper management, resettlement work could provoke serious dissatisfaction within the community, damage relationships with the community, and impede the Company from obtaining a "social licence". In the project planning phase, we make every effort to avoid or minimise involuntary resettlement. If avoidance is not possible, we comply with the host country's relevant laws and regulations and follow the methods of Performance Standard 5 set by the International Finance Corporation (IFC), communicating and negotiating fully with all stakeholders. This ensures that the adverse impacts are minimised and the affected residents receive fair treatment, equitable compensation, and opportunities to acquire skills for future livelihoods.



### In China

To improve living and production conditions in the Jingmei Village near the Zijinshan Gold and Copper Mine, the government organised and the Company funded the relocation of the entire village, helping over 2,400 residents move from remote mountain areas to new settlement sites in the urban area. During the reporting period, the relocation work was largely completed, with 98.5% of residents signing the relocation agreement and pleasingly settling in new areas. The company has also formulated a follow-up support plan, providing job skills training and employment opportunities to improve and enhance their standard of living.



#### In Tajikistan

Due to the construction of the tailings storage facility, the subsidiary Zeravshan conducted relocation and resettlement activities for approximately 47 households in the surrounding area. To ensure the rights of the affected residents, Zeravshan established a working group involving representatives from the Hongjialong Village under the organisation of the government, determined a resettlement plan, and signed a collaboration agreement with the company for the construction of the tailings storage facility. During the reporting period, Zeravshan completed a series of activities and legal procedures including loss assessment, resettlement site planning and design, and land allocation for resettlement. The company is currently carrying out compensation and residents relocation and resettlement work.

### In the DR Congo

To ensure safety around the pit and the efficient use of land, and to reduce the production operation's impact on the community, COMMUS plans to relocate the THABULA community. To this end, COMMUS has held several meetings with the community, government, human rights organisations, and other relevant departments, extensively listening to the opinions and suggestions of different stakeholders. Combining relevant international norms and regulations of the DR Congo, it has developed a resettlement scheme, providing villagers with various options such as relocation and monetary compensation. During the reporting period, COMMUS focused on completing the compensation and resettlement of approximately 160 households on the northwest side of the pit and the relocation and construction of a school on the northeast side of the pit. The process was monitored by a local human rights NGO in the DR Congo, and COMMUS will improve the relocation process based on the NGO's reports and recommendations.

### **O** Recovery of Livelihoods After Mine Closure

The end of mineral resource development does not mean that enterprises can cease fulfilling their social responsibilities to the local communities. As a responsible mining company, Zijin Mining not only focuses on ecological restoration but is also committed to assisting communities in acquiring sustainable livelihoods, ensuring that residents can maintain their standard of living or achieve an even better one after the Company's departure.

From the inception of project development, we incorporate mine closure plans, referring to the principles of the International Council on Mining and Metals (ICMM) and international best practices. We allocate an adequate budget for mine closure, fully considering the requirements for post-closure land restoration, employee welfare, and community development, to guarantee the execution of mine closure plans.

After the end of mine operations, we develop new industries based on local conditions to enhance the economic building capabilities of local communities and promote the reuse of infrastructure post-closure. This leaves valuable assets for the community, such

## Future Plans

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as constructing tourism infrastructure to develop mine parks. Regarding individual employee's future development, we give priority to re-employing staff in other subsidiaries of Zijin Mining according to their wishes, or helping local employees find other career opportunities. This approach not only brings immediate economic benefits to the community but also improves regional economic resilience, enabling autonomous and sustainable development after mine closure.

During the reporting period, the only mine in the closure process, West Copper in Qinghai continued to implement environmental restoration and welfare work to meet the needs of the local community. As for the future livelihood of employees, West Copper fully respects their wishes by offering job recommendations to all staff. For those who choose not to accept such recommendations, we engage in thorough communication, negotiate contract termination in a lawful and compliant manner, and provide financial compensation. To date, we have provided a total economic compensation of RMB 26.8325 million.

The Company has formulated and published the "Community Work Policy," crafting specific "Community Work Requirement Details" tailored to the projects in various host countries according to their national contexts.

In line with international standards, we have developed a unified complaint mechanism standard with Zijin's characteristics and a community grievance system, as well as established a system for community grievance and regularly review the grievance mechanisms.

We have strengthened the management of community ESG risks by completing risk assessments for all subsidiaries, refining the community risk inventory, and developing appropriate response plan.

# **Responsible Supply Chain**

The mining and trading of mineral resources can generate considerable economic value, promote socioeconomic development, and drive community prosperity, as well as establish mutually beneficial relationships among communities, enterprises within the supply chain, and individual partners and collaborators. We emphasise responsible management of the supply chain and require our suppliers to conduct their business in a responsible manner, which is a prerequisite for engaging in business with us.

## Governance

A comprehensive supply chain management system has been established to ensure a longterm and stable supply of goods, services, and raw materials related to the Company's business. Additionally, our suppliers are encouraged to uphold sustainable development principles and performance consistent with Zijin Mining. During the reporting period, we further refined the Company's responsibilities for responsible supply chain management. A specialist team for responsible supply chains was formed at the headquarters level, coordinated by the marketing department and the ESG office. Each business sector is responsible for promoting responsible supply chain management among subsidiaries. Trading companies, smelting and processing companies, and mining companies within our group established their management systems according to their role in the supply chain and their business characteristics and have cooperated with upstream and downstream enterprises to maintain responsible supply chain practices.



## **Risk Management**

The risk of supply chain disruptions can have a significant impact on our business operations, such as delays in product supplies and issues with product quality. We identify key suppliers (based on the quantity or importance of supplied materials) to pinpoint areas of supply chain risk and implement a risk-based procurement management approach. Using the identified critical suppliers, we trace major transit countries, ports, and transportation companies within the goods supply routes. We reference lists of high-risk, sensitive areas such as the European Union's List of Conflict-Affected and High-Risk Areas (CAHRAS), the Heidelberg Conflict Barometer, the Fragile States Index, and the United Nations sanctions list. Enhanced due diligence is conducted on suppliers originating from or passing through these areas to ensure effective control of supply chain risks.

#### The risk categories we focus on include:



Should we have reasonable grounds to believe that a supplier poses the aforementioned risks, we will immediately develop, adopt, and implement a risk management plan for upstream suppliers and other stakeholders based on their specific position within the supply chain. This is to ensure that such risks are contained or mitigated. In the case of suppliers presenting extremely high risks, we will promptly suspend or terminate our cooperation with them. Continuous monitoring and tracking of the implementation and completion of risk management plans will be conducted, including periodic assessments of their effectiveness. Additionally, we will monitor and perform supplementary evaluations of risks that need to be mitigated when changes in actual circumstances or within the supply chain occur.

Zijin Mining Responsible Supply Chain Governance Structure

# Strategy and Management Approach

Zijin Mining implements management systems such as the "Supplier Management Measures," "Supplier Code of Conduct", "<u>Policy Statement on Whistleblowing Management</u>", and "<u>Policy Statement</u> on <u>Business Ethics Management</u>". These systems encourage suppliers to responsibly conduct their business in a manner that is ethically sound, ensuring that suppliers' ethics, safety, health, and human rights standards, as well as their social and environmental performance, are aligned with Zijin Mining's own.

To ensure consistency in suppliers' ethics, safety, health, and human rights standards, as well as social and environmental performance, we also incorporate a requirement to comply with the "Supplier Code of Conduct" in the standard purchase agreements signed with suppliers. Our goal is to align the suppliers' ethical practices, safety, health, human rights standards, and social and environmental performance with ours.

# ◎ Responsible Supply Chain Management

In accordance with the "Chinese Due Diligence Guidelines for Mineral Supply Chain", we have established a responsible supply chain system and conduct our due diligence management using the sixstep framework provided by the standards. Following the principle of continuous improvement, we engage in discussions with suppliers and stakeholders to develop risk mitigation measures for the potential risks we have identified. Suppliers are guided and assisted in establishing and implementing their own supply chain due diligence management systems, with regular follow-up on the efficacy of their risk mitigation efforts. We adopt a management approach of either continuing or suspending cooperation based on the ongoing reduction of risks. In cases where risks are deemed unacceptable or mitigation measures are ineffective, we implement a management strategy of terminating cooperation. Furthermore, should there be changes in the environment, we will carry out additional factual and risk assessments.

Due diligence management system	<ul> <li>Establish mineral supply chain due diligence policies and management systems</li> <li>Develop a "Supplier Code of Conduct" for supplier selection</li> <li>Establish standards that require mineral suppliers to exercise due diligence in managing the sourcing of copper and zinc mineral products in accordance with the "The Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains"</li> </ul>
Risk identification and assessment	<ul> <li>Establish work processes and systems related to risk identification in the following ways</li> <li>Send out and collect supplier survey questionnaires</li> <li>Establish identification and management procedures for Conflict-Affected and High-Risk Areas (CAHRAs)</li> <li>Conduct risk assessments on suppliers through online platforms and other means of consultation</li> <li>On-site visits</li> <li>Third-party audits</li> </ul>
Risk prevention and mitigation	<ul> <li>Develop differentiated risk mitigation plans for suppliers of varying regions and sizes, including but not limited to the following</li> <li>Incorporate ESG and sustainability-related matters into the raw material procurement contract review process</li> <li>Conduct third-party independent audits of the system's operational effectiveness</li> <li>Implement due diligence questionnaires for supplier responsibility management</li> <li>Develop work supervision schedule</li> </ul>
Supervision and Audit	Establish and operate a responsible management system for mineral supply chains, promoting the comprehensive implementation of responsible supply chain management
Information disclosure	<ul> <li>Disclose annual reports on due diligence management, due management policies, and due management grievance mechanisms on the subsidiaries' official website</li> <li>Encourage peers and supply chain partners to engage in responsible supply chain due diligence management</li> <li>Actively participate in China and global activities and forums on responsible management of mineral supply chains, promoting responsible management and practices of mineral supply chains throughout the industry</li> </ul>
Cooperation	<ul> <li>Establish a rapid response mechanism: develop a quick reaction plan for potential risks and issues within the supply chain</li> <li>Provide support and resources: offer necessary support and resources to suppliers when they encounter difficulties or challenges, helping them to overcome issues; collaborate with suppliers to develop improvement plans, assisting them in enhancing sustainability and transparency</li> <li>Establish a mutually beneficial relationship: build a relationship of trust and mutual benefit with suppliers to jointly address issues and challenges in the supply chain; seek common interests in collaboration and achieve continuous improvement of the supply chain through cooperative efforts</li> <li>Monitoring and Assessment: establish monitoring and assessment mechanisms to regularly evaluate the performance and sustainability of the supply chain; analyse potential risks and issues, and take timely measures for improvement</li> <li>Innovation and Research &amp; Development: encourage innovation and research and development to explore new technologies and solutions that enhance the sustainability and efficiency of the supply chain; collaborate with suppliers and research institutions to jointly advance innovation and development within the supply chain</li> </ul>

To effectively establish our management system and attain relevant certifications, we are proactively implementing a talent system for due diligence management and nurturing crossdisciplinary professionals with ESG and supply chain management expertise. During the reporting period, we organised for the Company's ESG office, marketing department, trading companies, and smelting enterprises to participate in due diligence management internal auditor training organised by China Minmetals Chemicals Import and Export Chamber of Commerce. We also engaged external experts to provide in-house training.

During the reporting period, we actively promoted due diligence reviews of the origins of raw materials such as copper cathode, zinc ingots, gold, and silver. We introduced third-party auditing institutions to carry out responsible sourcing certification, and Zijin's 4 smelters, i.e. Zijin Copper, Heilongjiang Zijin, Jilin Zijin Copper, and Bayannur Zijin, successfully passed the third-party certification audits and submitted reports to the London Metal Exchange (LME). In addition, Zijin Copper and Zijin Gold Smelting , two refineries, undertook the construction of responsible sourcing systems for gold and silver and third-party responsible sourcing certification, receiving certification thereafter. The supply chain management efforts for Zijin Mining's cathode copper and zinc ingots registered with the LME, as well as gold and silver registered with the London Bullion Market Association (LBMA), are now in compliance with responsible raw material sourcing policies of both institutions.

## O Supplier Qualification Assessment

We advocate for establishing long-term, stable relationships of integrity with our suppliers, setting up regular high-level communication mechanisms with them to enhance their awareness of fulfilling social responsibilities and advancing the construction of a responsible supply chain. Our supply chain spans the globe; therefore, we systematically share Zijin Mining's sustainability concepts, anti-corruption policies, environmental protection philosophies, and green procurement policies on the Yizhi Procurement Platform. To ensure effective learning, every supplier who logs into our platform must complete the required reading before they can proceed with registration, quoting, or other business activities, ensuring that our suppliers adhere to our standards.

We have formulated the "Supplier Management Measures" to strictly regulate supplier assessment and access, and we give scores to suppliers across three dimensions: environmental protection, social responsibility, and corporate governance. During this reporting period, we conducted a qualification review of applications from 3,845 new suppliers. Upon review, 1,523 suppliers were considered qualified for access, representing an access ratio of 40%.

### O Supplier Review and Assessment

We regularly review and assess the status of responsible construction among our suppliers, evaluating risks in environment, safety, and social responsibility dimensions, and take corresponding actions. Suppliers who commit serious breaches of contract or legal violations may be blacklisted for 1 to 3 years; whereas those with significant quality issues, serious safety or environmental hazards, bribery, or who have been listed by government authorities in the "blacklist" for poor records in production and operational safety, will be directly removed from our list of suppliers and barred from future collaboration.

During the reporting period, we conducted on-site assessments of 163 suppliers, focusing on their workplace environment, occupational safety, environmental protection measures, and labour conditions as key aspects of our social responsibility review. Through on-site visits, concentrated review sessions, and verification of daily issues, we maintained 550 critical suppliers. We awarded 5 suppliers with the Excellent Collaboration Award for outstanding performance, and bestowed the "Excellent Collaborator" medals to 5 suppliers for excellent cooperation.

### Suppliers

Indicator	Unit	2023	2022	2021
Number of suppliers	\	6,712	5,444	5,380
-Number of critical suppliers	\	550	780	745
Number of new suppliers selected by ESG standards	\	1,523	1,547	762
Number of suppliers evaluated by ESG standards	\	3,845	2,327	1,507
Suppliers confirmed as having actual and potentially significant negative ESG impacts	/	7	3	10
-Suppliers which have agreed to take rectification measures	\	2	0	2
-Suppliers with terminated cooperation	\	5	3	8

## ○ Localised Procurement

We practice a dual approach to global and local procurement, fully considering community needs and giving priority to purchasing locally for materials with regional advantages. This includes the following initiatives:



By supporting local businesses through localised procurement, we increase local government tax revenue and contribute to community economic development. We regularly monitor the share of local procurement. During the reporting period, our local procurement rate reached 80.3%.

# **Future Plans**

Continuously improve and standardise the processes, standards, and transparency of responsible supply chain management.

Provide training and education for employees on sustainable development and supply chain management, enhancing their professional qualifications and capabilities.

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Strengthen collaboration upstream and downstream on responsible supply chain work, share best practices and success stories, and encourage mutual learning and growth among supply chain enterprises.



"Zijin COMMUS Cup" Community Football Tournament

# **Product Responsibility**

## **Product Management**

We abide by the "Putting Our Foothold in Gold Products, Achieving Mutual Benefits and Win-Win Situation" business philosophy, implementing quality management and customer service systems such as the "Zijin-Brand Product Quality Management Measures" and "Customer Service Management Procedures". Various channels are utilised to collect customer information related to products and services. A customer needs database is established to promptly communicate customer needs and suggestions to production, technical, process, equipment, and quality departments. Product improvement plans are promptly devised, aiming to continuously enhance product quality and service. Internal control standards for gold ingot quality have been established with the "Quality Inspection Rules for Finished Gold Bullion". These rules ensure that the gold ingots leaving the factory meet 100% of the national product standards and the requirements of the Shanghai Gold Exchange SGEB1-2019 gold ingot standard. The gold ingots, silver ingots, cathode copper, and zinc ingots produced by the Company respectively meet or exceed the technical parameters of the national standards GB/T4134-2021 (gold ingots), GB/T4135-2016 (silver ingots), GB/T467-2010 (copper cathode), and GB/T470-2008 (zinc ingots). Zijin Gold Smelting is among the first batch of gold smelters recognised by the Shanghai Gold Exchange to provide as standard gold bullion provider and has been awarded the title of "Advanced Standard Gold Bullion Provider" by the Shanghai Gold Exchange for 16 consecutive years. 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).

The Company organises annual assessments of subsidiary laboratories' testing capabilities, promoting standardised laboratory management concepts and models. It guides them in effective root cause analysis and developing pragmatic corrective measures to continuously elevate testing quality, fully utilise the functions of the quality supervision centre, and strictly adhere to product quality. Also, through quality control of "Zijin" brand gold ingots at off-site refineries and annual on-site quality audits and blind sample assessments, we encourage improvement in quality management levels, ensuring 100% of gold bullion products meet standard requirements. Furthermore, we organise occasional spot checks on "Zijin" brand products to ensure continuous quality enhancement and timely response and resolution of quality issues. Through multidimensional quality control, we ensure the provision of high-quality products to the market.

#### Product Management

Indicator	Unit	2023	2022	2021	2020
Qualified mineral product ratio	%	99.98	100	99.90	99.80
Number of products recalled for safety and health reasons	١	0	0	0	0
Number of complaints lodged due to safety and health reasons	١	0	0	0	0
Customer satisfaction	%	99.65	99.60	99.22	99.29
Wood for packaging products	Tonne	479	703	699	253
Bags for packaging concentrate products	Tonne	2,887	3,818	1,841	2,370



# **Information Security**

We respect the privacy rights of all stakeholders and strive to protect their privacy and information security. We have an Information Technology Committee responsible for decision-making on major information security matters such as security management guidelines and policies, guiding subsidiaries in building information security systems. The Information Security Officer reports monthly to the committee on the Company's information and privacy security status. During the reporting period, there were no incidents of customer privacy breaches.

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

Personnel securityData centre security

- Third-party access
- Ou
- Information asset security
- Network security
- Software system security
- Client security
- Security of documents, data, and storage media
- Outsourcing
- Information security emergency response
- Cloud computing security
- Mobile internet security
- Internet of Things security
- · Industrial control system security

In accordance with the "Contingency Plan for Information Security Incidents", we have specified the importance levels for various types of information security incidents such as network interruptions, equipment malfunctions, and procedures for emergency reporting, handling, and disclosure. At the same time, we have clarified the reporting procedures and time limits for information security emergencies, incorporating information security performance into annual assessment indicators for relevant personnel and linking it to incentive compensation.

Annually, we conduct special activities and presentations related to information security and privacy protection, as well as awareness training and assessments. During the reporting period, our training for information security and privacy protection achieved a coverage rate of 100%.

# **Technological Innovation**

Technological innovation is the "core competitiveness" of Zijin Mining's development. In the process of rapid international expansion, Zijin Mining advances high-quality, coordinated green development through continuous technological and management innovation by consistently proposing "Zijin Solutions" for various projects, serving as a vital dynamic and theoretical foundation.

#### Technology Innovation Policy System

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.

To foster an excellent atmosphere for scientific innovation, we adhere to a "R&D fault-tolerance policy", continuously refining technology achievement incentive, and technical title evaluation systems, enhancing the growth and advancement opportunities for scientific personnel, allowing those dedicated to research to return to their suitable positions. We also study the mechanisms and systems of market-oriented, technology-based new industries, fully stimulating organisational and individual vigor, encouraging and supporting mining personnel to dive into the front lines to solve problems and create value, with results shared by those who significantly contribute. The evaluation of scientific personnel is strengthened, with efforts directed towards exploring more efficient and scientific project management and research incentive systems. This initiative aims to enhance the efficiency and enthusiasm of technological workers. Additionally, we increase the sharing of scientific achievements by experimenting with technology shares and project declaration for leadership systems. These measures incentivise employees to be innovative and continuously improve research efficiency.

#### **Technological Innovation Achievements**

Leveraging Zijin's "Innovation Concept" and the "Five-Stage Life-of-Mine Project Management Procedure" engineering management innovation model, we concentrate on key technologies or production bottlenecks crucial for enterprise development. This approach enables us to advance technological work solidly, effectively addressing production and technical challenges. Breakthroughs have been achieved in fundamental and overarching issues within mining, selection, and smelting technology research, enabling technological advancements to generate greater value for the Company.

During the reporting period, our technology projects continue to focus on 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, we organised and established 164 technology project, and we actively followed and participated in government technology plan projects. In 2023, we successfully applied one national key R&D project, and one Fujian Province technology plan project respectively.

Attention is also given to intellectual property protection and the joint enhancement of industry standards. During the reporting period, the Company applied for 56 patents in total, including 37 invention patents; 36 patents granted, 22 of which were invention patents. It participated in the drafting and revision of 22 standards, including 1 international standard; a total of 17 subsidiaries and the Company's headquarters were awarded as "High-tech Enterprises".



# **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 2023.

#### **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").<sup>1</sup>

#### **Reporting Cycle and Reporting Scope:**

1 January to 31 December 2023 (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: -Appendix C2 "Environmental, Social and Governance Reporting Guide" of the "Main Board Listing Rules" published by the Hong Kong Stock Exchange (HKEX);

-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";

-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);

-Recommendations of the Task Force on Nature-Related Financial Disclosures (TNFD);

-IFRS Sustainability Disclosure Standard S1&S2 of the International Sustainability Standards Board(ISSB);

-The "China Corporate Social Responsibility Report - Corporate Social Responsibility Preparation Standard CASS-CSR5.0 - General Mining Industry" of the Chinese Academy of Social Sciences;

-The "Performance Standards on Environmental and Social Sustainability" of the International Finance Corporation (IFC);

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

#### **Guidance document:**

Our approach to environmental, social and governance management includes adherence to or support for the following documents: -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 "Declaration on the rights of indigenous peoples";

-The "United Nations Framework Convention on Climate Change", "Kyoto Protocol" and "Paris Agreement";

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

-The Organisation for Economic Co-operation and Development

(OECD) "Guidelines for Multinational Enterprises and Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict -Affected and High-Risk Areas";

-The ILO "Declaration on Fundamental Principles and Rights at Work" ; -The "Kunming-Montreal Global Biodiversity Framework";

-The "Global Industry Standard on Tailings Management";

#### **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 2023 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 AA1000AS v3 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 multi-language. In the case of any discrepancies, the Chinese version shall prevail.

Note: 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.

# Zijin Mining 2023 ESG Performance Data

## **Economic**

Indicator	Unit	2023	2022	2021	2020	2019
Business performance						
Revenue	RMB100 million	2,934	2,703	2,251	1,715	1,361
Profit before tax	RMB100 million	313	300	248	108	70
Net profit attributable to owners of the parent	RMB100 million	211	200	157	65	43
Total assets at the end of the reporting period	RMB100 million	3,430	3,060	2,086	1,823	1,238
Production volume						
Mine-produced copper	10,000 tonnes	101	88	58	45	37
Mine-produced gold	Tonne	68	56	48	41	41
Mine-produced zinc (lead)	10,000 tonnes	47	44	43	38	37
Mine-produced silver	Tonne	412	387	309	299	263
Resources						
Copper	10,000 tonnes	7,456	7,372	6,277	6,206	5,725
Gold	Tonne	2,998	3,117	2,373	2,334	1,887
Zinc (lead)	10,000 tonnes	1,068	1,118	962	1,033	856
Lithium carbonate	10,000 tonnes	1,347	1,215	763	/	/

## Governance

## $\odot$ 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%

## $\bigcirc$ Business ethics

Indicator	2023	2022	2021	2020	2019
Business ethics training coverage					
Directors, supervisors and senior management	100%	100%	100%	87.19%	83.29%
Employees	87.97%	75.50%	64.82%	63.96%	68.00%
Suppliers and contractors	73.77%	70.90%	62.10%	61.55%	58.24%
Whistleblowing reports					
-Total number of whistleblowing reports received	243	204	154	104	/
-Total number of whistleblowing reports completed	227	195	145	/	/
Sources of whistleblowing reports					
-from employees	121	86	63	28	/
-from suppliers and contractors	57	63	54	33	/
-from other stakeholders	65	55	37	43	/
Type of whistleblowing reports					
-Business ethics	112	104	/	/	/
-Remuneration	67	53	/	/	/
-Working environment	34	27	/	/	/
-Human rights	26	16	/	/	/
-Community relation	4	4	/	/	/

# Environment

## $\bigcirc$ Environmental protection

Indicator	Unit	2023	2022	2021	2020	2019
Investment in environmental protection	RMB100 million	13.70	14.67	14.20	10.92	7.25
-investment in eco-restoration	RMB100 million	3.69	4.89	3.35	0.96	0.95
Area of vegetation restored	Million m <sup>2</sup>	6.22	12.75	7.76	3.33	5.25
Number of trees planted	Million	3.86	1.21	1.15	0.41	1.34

## **○** Climate change

Indicator	Unit	2023	2022	2021	2020	2019
Total GHG emissions (SCOPE 1+2)	Million tCO <sub>2</sub> e	8.41	7.78	7.26	6.11	5.35
GHG emissions intensity by industrial added value	tCO₂e/RMB 10,000	1.53	1.55	1.79	1.85	1
-Direct GHG emission (SCOPE 1)	Million tCO <sub>2</sub> e	3.60	3.12	2.79	2.54	2.02
-Indirect GHG emissions (SCOPE 2)	Million tCO <sub>2</sub> e	4.81	4.66	4.47	3.57	3.33
-Other indirect GHG emissions (SCOPE3)	tCO <sub>2</sub> e	3,429	/	/	/	/
Investment in climate change management	RMB100 million	4.56	5.93	1	/	/

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. For the calculation of other indirect greenhouse gas emissions (SCOPE3), only carbon emissions generated by business travel were calculated in this reporting period, using the expenditure-based methodology as well as the carbon emission factors of the GHG Protocol. 4. 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. 5. 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	2023	2022	2021	2020	2019
	Paraffin	Tonne	379	592	1,481	1,833	3,929
	Diesel	Tonne	529,236	392,930	345,894	256,856	202,336
Direct	Gasoline	Tonne	614	1,061	1,502	1,457	1,162
energy	Coal	Tonne	528,850	560,249	636,682	859,536	610,665
	Natural gas	Million cubic metres	25	18	23	14	36
	Other direct energy	, TJ	17.93	57.16	230.61	425.46	520.57
	Electricity	GWh	9,300	8,127	6,681	5,335	4,893
	-Non-green power	GWh	5,057	5,485	6,331	5,011	4,687
Indirect	-Hydropower	GWh	4,003	2,544	347	324	206
energy	-Solar power	GWh	83	43	3	/	/
	-Other renewable energy	GWh	157	53	/	/	1
	Steam	TJ	-1,495.55	-935.70	-802.56	-783.41	-907.62

Indicator	Unit	2023	2022	2021	2020	2019
Energy consumption by source (GW	′h):					
Total energy consumed	GWh	19,022.46	16,294.54	15,236.89	14,271.21	11,377.08
Total direct energy (non- renewable energy) consumed	GWh	10,137.58	8,419.35	8,777.92	9,153.24	6,735.34
-Paraffin	GWh	4.42	7.09	18.41	22.79	48.84
-Diesel	GWh	6,704.81	4,654.41	4,163.55	3,091.80	2,440.22
-Gasoline	GWh	7.54	12.71	18.70	18.14	14.46
-Coal	GWh	3,151.64	3,545.46	4,265.43	5,744.37	4,042.94
-Natural gas	GWh	264.19	183.81	247.77	157.95	44.27
-Other direct energy sources	GWh	4.98	15.88	64.06	118.19	144.61
Total indirect energy consumed	GWh	8,884.88	7,875.19	6,458.25	5,117.37	4,435.47
-Electricity	GWh	9,300.31	8,126.68	6,681.20	5,335.00	4,893.00
-Steam	GWh	-415.43	-251.49	-222.95	-217.63	-252.14
Energy consumption by source (TJ):						
Total energy consumed	TJ	68,480.86	58,655.64	54,848.40	51,372.24	40,954.20
Total direct energy consumed	TJ	36,495.29	30,307.23	31,598.00	32,949.02	24,245.30
-Paraffin	TJ	15.91	25.51	66.26	82.03	175.83
-Diesel	TJ	24,137.32	16,754.54	14,987.58	11,129.59	8,784.08
-Gasoline	TJ	27.14	45.73	67.31	65.28	52.05
-Coal	TJ	11,345.90	12,762.66	15,354.34	20,678.08	14,553.42
-Natural gas	TJ	951.08	664.99	891.91	568.57	159.36
-Other direct energy sources	TJ	17.93	57.16	230.61	425.46	520.57
Total indirect energy consumed	ТJ	31,985.57	28,348.41	23,247.83	18,421.05	15,966.41
-Electricity	TJ	33,481.12	29,253.70	24,050.39	19,204.46	17,613.39
-Steam	TJ	-1,495.55	-935.70	-802.56	-783.41	-907.62
Energy consumption structure:						
Energy consumption intensity by	MWh/RMB 10,000	3.46	3.25	3.75	4.32	1
industrial added value	MJ/RMB 10,000	12.45	11.69	13.50	15.53	1
Ratio of direct energy (fossil energy) consumed	%	53.29	51.67	57.61	64.14	59.20
Ratio of indirect energy consumed	%	46.71	48.33	42.39	35.86	40.80
Ratio of renewable energy consumed	%	21.48	16.21	/	/	/

Indicator	Unit	2023	2022	2021	2020	2019
Clean energy						
Installed capacity of clean energy	MW	244.05	167.48	117.00	/	/
Clean energy generated	GWh	380.90	257.46	113.26	/	/
-Hydropower	GWh	262.01	201.43	107.10	/	/
-Solar power	GWh	83.05	31.49	6.16	/	/
-Others	GWh	35.84	24.54	/	/	/

Notes:

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. 3. 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.

## **O** Water stewardship

Indicator	Unit	2023	2022	2021	2020	2019
Total water withdrawal	Million tonnes	66.13	72.71	60.56	50.77	45.23
Water intensity by revenue	Tonne/RMB million	225.39	269.00	269.04	296.04	332.33
Total water discharge	Million tonnes	46.40	51.52	42.29	20.82	20.56
Water re-use rate	%	94.80	94.29	92.02	91.86	91.29
Water withdrawal by wat	er categories					
-Freshwater	Million tonnes	55.47	61.96	40.47	35.59	33.97
-Non-freshwater	Million tonnes	10.66	10.75	20.09	15.18	11.25
Water withdrawal by wat	er sources					
-Surface water	Million tonnes	47.09	65.09	43.11	34.83	31.42
-Ground water	Million tonnes	13.97	3.08	8.78	7.71	5.65
-Externally purchased water	Million tonnes	5.08	4.54	4.58	3.71	3.22
Water discharge by water	categories					
-Freshwater	Million tonnes	36.31	46.90	/	/	/
-Non-freshwater	Million tonnes	10.09	4.62	/	/	/
Water discharge by sourc	es					
-Surface	Million tonnes	46.19	51.48	/	/	/
-Ground	Million tonnes	-	-	/	/	/
-External institutions	Million tonnes	0.21	0.04	/	/	/

Indicator	Unit	2023	2022	2021	2020	2019		
Water withdrawal in water stressed areas								
Total water withdrawals in water stressed areas	Million tonnes	12.42	10.06	8.81	6.48	7.10		
Ratio of total water withdrawals water stressed	%	18.77	13.83	14.55	12.77	15.69		
areas								

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.

3. As stated in our ESG report, our projects in high water risk areas and neighbouring stakeholders are generally not exposed to material water risks, and water withdrawals for growth have been justified on the basis of water resources and will not have a material impact on neighbouring communities, the natural environment and other stakeholders.

## **O** Water pollutants

Indicator	Unit	2023	2022	2021	2020	2019
Discharge volume						
COD	Tonne	294.06	373.51	524.13	299.82	346.33
Ammonia nitrogen	Tonne	28.14	45.92	27.60	3.58	14.43
Total copper	Tonne	2.14	1.57	2.26	0.73	0.60
Total zinc	Tonne	0.59	0.80	1.27	0.46	0.40
Discharge intensity	by revenue					
COD	g/RMB million	1,002.25	1,381.83	2,328.43	1,748.21	2,544.70
Ammonia nitrogen	g/RMB million	95.91	169.89	122.61	20.87	106.03
Total copper	g/RMB million	7.29	5.81	10.04	4.26	4.41
Total zinc	g/RMB million	2.01	2.96	5.64	2.68	2.94

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

## **O** Acid rock drainage

Indicator	Number	Ratio
Mines with risk of acid rock drainage	9	15.79%
- Mines where acid rock drainage is predicted to occur	/	0.00%
- Mines where acid rock drainage is actively mitigated	4	7.02%
- Mines where acid rock drainage is under treatment or remediation	5	8.77%

## ◎ Non-hazardous waste

Indicator	Unit	2023	2022	2021	2020	2019
Total non-hazardous waste generated	Million tonnes	959.72	708.35	640.50	554.60	452.18
- On-site diverted from disposal	Million tonnes	139.64	99.24	82.19	66.44	30.32
- Off-site diverted from disposal	Million tonnes	3.18	4.95	5.05	5.16	4.47
- On-site directed to disposal	Million tonnes	816.76	519.31	444.82	381.22	312.62
- Off-site directed to disposal	Million tonnes	0.14	84.85	108.44	101.78	104.77
Non-hazardous waste comprehensive utilisation rate	%	14.88	14.71	13.62	12.91	7.69
Non-hazardous waste generated intensity by revenue	Tonne/RMB 10,000	32.71	26.21	28.45	32.34	33.22
Tailings						
Total tailings generated	Million tonnes	177.44	159.94	114.34	97.38	86.03
Total tailings recycled	Million tonnes	42.33	36.95	25.28	20.73	16.46
Recycling rate	%	23.86	23.10	22.11	21.29	19.13

## **O** Hazardous waste

Indicator	Unit	2023	2022	2021	2020	2019
Total hazardous waste	Tonne	160,885.78	320,813.40	357,214.01	279,286.75	414,012.78
- On-site diverted from disposal	Tonne	5,478.61	1,827.42	42,097.84	25.06	24.60
- Off-site diverted from disposal	Tonne	73,325.69	153,484.30	79,617.90	64,747.03	65,294.27
- On-site directed to disposal	Tonne	76,072.02	21,190.37	228,658.34	212,373.35	345,905.39
- Off-site directed to disposal	Tonne	6,009.46	144,311.31	6,839.93	2,141.31	2,788.52
Hazardous waste comprehensive utilisation rate	%	48.98	48.41	34.07	23.19	15.78
Hazardous waste generated intensity by revenue	Tonne/RMB million	0.55	1.19	1.59	1.63	3.04

## **O** Air emissions

Indicator	Unit	2023	2022	2021	2020	2019
Nitrogen oxides (NO <sub>x</sub> )	Tonne	687.19	802.22	888.41	768.81	957.17
Sulphur dioxide (SO <sub>2</sub> )	Tonne	1,348.22	1,248.70	1,483.64	1,344.86	1,380.71
Particulate matter (PM)	Tonne	611.51	616.23	754.30	646.60	643.50
Sulphuric acid mist	Tonne	78.55	69.44	76.91	102.12	48.38
Hydrogen chloride	Tonne	2.01	1.07	0.22	0.12	0.19

Indicator	Unit	2023	2022	2021	2020	2019
Ammonia	Tonne	0.87	0.34	1.00	0.33	0.01
Hydrogen sulphide	Tonne	1.25	0.01	0.00	0.01	/
Lead and its compounds	Tonne	0.80	1.11	1.28	0.97	1.08
Arsenic and its compounds	Tonne	0.85	0.77	0.83	0.76	0.91
Mercury and its compounds	Tonne	0.04	0.03	0.10	0.02	0.02
Volatile organic compounds (VOCs)	Tonne	0.51	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 Provide a construction of the provide and the pro

## **○** Tailings storage facilities

Indicator	2023	2022	2021
Number of tailings storage facilities	60	60	52
Number of active tailings storage facilities	37	33	37
Number of tailings storage facilities at risks	0	0	0

## **© EMS certification and environmental audit**

Indicator	2023	2022	2021
ISO14001:2015 certification coverage	97.5%	97.5%	87.5%
Environmental audit coverage	100.0%	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.

## Society

## O Labour

Indicator	Unit	2023	2022	2021	2020	2019
Number of workforce						
Number of employees	/	55,239	48,836	43,876	36,860	36,605
Number of contractors	/	30,459	28,222	/	/	/
By gender						
-Male	%	85.08	85.08	84.39	83.86	83.88
-Female	%	14.92	14.92	15.61	16.14	16.12
By age						
-<30	%	23.65	25.38	23.38	17.01	17.48

Indicator	Unit	2023	2022	2021	2020	2019
-30≤Y<50	%	61.53	59.91	60.93	63.75	60.10
-≥50	%	14.83	14.71	15.69	19.24	19.43
Local employment rate	%	95.85	96.29	96.04	95.25	95.11

## ◎ Employee turnover

Indicator	Unit	2023	2022	2021	2020	2019
Number of new hires	1	7,570	4,960	7,016	255	1
Total employee turnover rate	%	8.00	8.66	7.57	9.31	7.68
By gender						
-Male	%	7.92	8.55	7.25	8.72	7.66
-Female	%	8.47	9.33	8.84	12.39	7.74
By age						
-<30	%	11.99	11.52	10.25	12.42	9.86
-30≤Y<50	%	7.28	7.63	5.63	6.83	6.48
-≥50	%	5.19	7.48	10.68	14.78	10.60
By region						
China	%	9.96	9.75	8.24	10.51	9.75
Other countries and regions outside China	%	6.01	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 antidiscrimination, 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 2023 is approximately 2,022.

## **©** Employee training

Indicator	Training ratio (%)	Average training hours
By gender		
Male	96.39	29.98
Female	95.33	30.29
By job level		
Upper-level employees	93.74	27.86
Mid-level employees	96.39	30.40
Entry-level employees	97.46	29.15

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	2023	2022	2021	2020	2019
Collective bargaining agreement coverage rate	%	74.68	82.62	/	/	/
By region						
Percentage of active workforce covered under collective bargaining agreements broken down by local employees	%	76.44	84.19	70.33	/	/
Percentage of active workforce covered under collective bargaining agreements broken down by foreign employees	%	25.76	42.00	35.33	/	/

## ○ Strikes and non-technical delays

Indicator	Unit	2023	2022	2021	2020	2019
Number of non-technical delays	/	3	4	0	/	/
Duration of non-technical delays	Day	112.00	229.53	0	/	/
Number of strikes and lockouts	/	1	2	4	/	/
Duration of strikes and lockouts	Day	3	0	3.75	/	/

## **O** Production safety

Indicator	Unit	2023	2022	2021	2020	2019
Investment in production safety	RMB100 million	28.04	21.23	14.93	8.91	6.75
ISO45001:2018 certification coverage	%	97.50	95.00	87.5	/	/
Number of work-related fatalities of our employees	1	1	1	4	0	0
Number of work-related fatalities of contractors' employees	/	10	2	4	2	1
Lost days	Day	9,503.00	12,940.00	2,540.75	5,909.50	4,448.25
Lost work hours rate (per million hours worked) <sup>1</sup>	/	311.33	494.38	105.62	328.35	251.88
Lost time injury rate (LTIR) (per million hours worked) <sup>2</sup>	/	0.25	0.29	0.30	0.33	0.89
Total recordable incident rate (TRIR) (per million hours worked) <sup>3</sup>	/	0.91	0.64	0.68	0.69	1.37
Near miss frequency rate (NMFR) (per million hours worked) <sup>4</sup>	/	0.88	0.14	0.18	0.07	0.16
Total number of hours worked	Million hours	244.18	209.39	192.44	143.98	141.28

#### 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,

2. ISO450012018 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

4. Lost time injury rate (LTIR) = Number of persons with lost time injury ÷ Total number of hours worked x 1,000,000

5. Total recordable incident rate (TRIR) = Number of persons with recordable incident injury + Total number of hours worked x 1,000,000 6. Near miss frequency rate (NMFR) = Number of near misses + Total number of hours worked x 1,000,000

## **○** Safety training

Indicator	Unit	2023	2022	2021	2020	2019
Cumulative number of safety training sessions attended by new employees	10,000	6.21	/	/	/	/
Number of training sessions per new employee	/	1.18	/	/	/	/
Cumulative number of attendances of safety training by current employees	10,000	121.35	44.94	33.43	23.97 (Excluding contractors)	/
Number of training sessions per current employee	/	16.06	5.30	5.00	6.8 (Excluding contractors)	/

## **O Product management**

Indicator	Unit	2023	2022	2021	2020	2019
Qualified mineral production ratio	%	99.98	100	99.90	99.80	99.90
Number of products recalled for safety and health reasons	/	0	0	0	0	0
Number of complaints lodged due to safety and health reasons	/	0	0	0	0	0
Customer satisfaction	%	99.65	99.60	99.22	99.29	99.28
Wood for packaging products	Tonne	479	703	699	253	206
Bags for packaging concentrate products	Tonne	2,887	3,818	1,841	2,370	2,725

## $\odot$ Technological innovation

Indicator	Unit	2023	2022	2021	2020	2019
R&D expenditure	RMB100 million	9.69	12.32	7.71	5.83	5.39
New patents	/	58	29	32	24	27

## **○** Suppliers

Indicator	Unit	2023	2022	2021	2020	2019
Total number of suppliers	/	6,712	5,444	5,380	4,669	4,923
-Suppliers from China	/	4,304	4,229	4,480	4,172	4,495
-Suppliers from countries and regions outside China	/	2,408	1,215	900	497	428
Number of new suppliers	1	1,532	1,547	762	917	592
Number of new suppliers selected by ESG standards	/	1,532	1,547	762	917	592
Local procurement rate	%	80.33	65.20	1	1	1

## **O** Supplier Management

Indicator	Unit	2023	2022	2021	2020	2019
Number of suppliers evaluated by ESG standards	/	3,845	2,327	1,507	1,384	1
Suppliers confirmed as having actual and potentially significant negative ESG impacts	1	7	3	10	0	1
'- Suppliers which have agreed to take rectification measures	/	2	0	2	0	/
- Suppliers with terminated cooperation	/	5	3	8	0	/
Number of blacklisted suppliers	/	180	177	169	/	1

## $\bigcirc$ Community investment

Indicator	Unit	2023	2022	2021	2020	2019
Community investment	RMB million	827.29	454.74	423.83	231.93	195.21
-Charitable donations	RMB million	297.32	250.67	268.24	178.03	166.28
-Development contributions	RMB million	529.97	204.07	155.59	53.90	28.93

## $\bigcirc$ Economic contribution

Indicator	Unit	2023	2022	2021	2020	2019
Direct economic contribution	RMB100 million	3,247.48	2,853.94	2,359.11	1,800.15	1,489.20
Salaries and benefits paid to employees	RMB100 million	98.35	91.08	71.51	39.59	37.65
Payments to suppliers	RMB100 million	2,854.44	2,511.41	2,106.53	1,635.57	1,338.64
Community donations	RMB100 million	2.97	2.51	2.68	1.66	1.78
Dividends distributed	RMB100 million	96.60	81.15	53.75	35.07	31.40
Interests paid to creditors	RMB100 million	57.46	39.53	24.04	23.09	20.48
Payments to governments (tax)	RMB100 million	137.66	128.26	100.60	65.17	59.25
Total social contribution value	RMB100 million	561.83	509.04	394.83	214.09	169.78
Social contribution value per share	RMB	2.13	1.94	1.53	0.84	0.73

# ESG Report Independent Verification Statement

#### To the management 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 Mining" or "the Company") to perform an independent third-party verification on its "2023 Environmental, Social and Governance Report" (hereinafter referred to as "the Report"). During this verification, TÜV SÜD's verification team strictly abided by the contract signed with Zijin Mining 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 Mining and provided to TÜV SÜD. The scope of verification is limited to the given information. Zijin Mining 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 Mining during the reporting period from January 1st, 2023 to December 31st, 2023, including economic, environmental and social information and data, methods for management of substantial issues, actions/measures and the Company's sustainability performance during the reporting period.

#### O Physical boundary of this verification:

The on-site verification sampling took place at below listed location, which is, Zijin Tower, No. 1 Zijin Road, Shanghang County, Longyan City, Fujian Province, China.

#### ○ Scope of data and information for the verification:

The scope of the verification 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 Mining'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 Company 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, 2023 are beyond the scope of this verification.

#### **Basis for the Verification**

This verification process was conducted by TÜV SÜD's expert team with extensive experience in the economic, environmental, social and other relevant areas and drew the conclusions thereof. The verification conforms to the following standards:

AA1000AS v3, Type 2 Engagement and Moderate level Assurance

TÜV SÜD Procedure of Verification on Sustainability Report

In order to perform adequate verification in accordance with the contract and provide limited 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 topics with high level of materiality and performance in the Report; On-site verification of all supporting documents, data and other information provided by Zijin Mining; tracing and verification of key performance information;

Special interview with the representative of Zijin Mining's management; 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 the Report adheres to the requirement of AA1000AS v3. The verification team has drawn the following conclusions on this Report:

Inclusivity	Zijin Mining has fully identified the Company's internal and external stakeholders, such as government and regulatory authorities, business partners, shareholders and investors, employees, surrounding communities and environment, Non-governmental organisation (NGO), media, and research and education institutions, etc., and has established a stakeholder communication mechanism to regularly collect the real demands of stakeholders.
Materiality	Zijin Mining has established a process for prioritizing material topics, identified and prioritized sustainability topics of high relevance to the industry, disclosed governance framework, management actions and performance data in the Company's sustainability management and operations processes, and reported materially.
Responsiveness	Focusing on topics of concern to stakeholders, Zijin Mining has clearly disclosed its approach and performance in managing high material topics in the areas of production safety, waste management, water resources management, human rights protection, community relations, professional ethics, occupational health, responsible supply chain, climate change and energy conservation and pollution reduction, local employment, community health and safety, etc., and has established a grievance mechanism to adequately respond to stakeholder requests and expectations.
Impact	Zijin Mining has established a sustainable development management mechanism, and established an ESG management Committee to promote and implement the Company's ESG strategy formulated by the Board of Directors, identify significant climate change risks, develop risk management measures, regularly monitor sustainability performance, and monitor and evaluate the economic, environmental and social impacts of its business activities.

#### **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 Mining are two entities independent of each other and both TÜV SÜD and Zijin Mining 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 Mining. 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

Zhu Wenjun TÜV SÜD Sustainability Authorized Signatory Officer March 15, 2024 Shanghai, China



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

# **RGMPs Independent** Verification Statement

#### To the Board of Directors of Zijin Mining Group Co., Ltd.:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch (hereinafter referred to as "TÜV SÜD") has been commissioned by Zijin Mining Group Co., Ltd. (hereinafter referred to as "Zijin Mining") to provide a limited verification of compliance with the World Gold Council's Responsible Gold Mining Principles (hereinafter referred to as "RGMPs") for the year 2023, which ended on 31st December 2023.

#### **Verification Conclusions**

In the Report prepared in accordance with the Reporting Standards, based on the procedures we have performed and the evidences we have obtained, we are of the opinion that: as at 31st December 2023, nothing has come to our attention that would indicate that Zijin Mining has not prepared, in all material respects, a Statement of Compliance with the Requirements of the Responsible Gold Mining Principles in accordance with the applicable standards.

#### **Scope of Verification**

The scope of the verification includes Zijin Mining's 2023 Environmental, Social and Governance Report as well as its systems, processes and performance implementation to comply with the requirements of RGMPs in 2023.

#### The physical location of this verification:

• Zijin Mining Group Company Limited Headquarter: Zijin Tower, Zijin Road, Shanghang, Longyan, Fujian Province, China

• Longnan Zijin Mining Company Limited: Malianwan, Luoba Town, Lixian, Longnan City, Gansu Province, China.

#### Respective responsibilities of the company and the independent verifier

Zijin Mining's responsibility is to ensure that the company designs, implements, executes, and monitors its business activities, processes and controls with the aim of ensuring compliance with policies and procedures that are in line with the principles. In addition, Zijin Mining is responsible for preparing and presenting RGMPs implementation Report.

In accordance with the terms set out, our role is to provide a limited verification engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) - Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ("ISAE 3000") and the RGMPs Assurance Certification Implementation Rules standards and to draw conclusions based on the work performed.

The procedures performed in a limited verification engagement differ from a reasonable verification engagement in that the scope of the limited verification engagement is much smaller than the content of the reasonable verification engagement, and therefore the level of verification obtained is significantly lower than the level of verification that would have been obtained if a reasonable verification engagement had been performed.

We conducted our verification engagements in accordance with the guiding principles set out in the Assurance Framework for the Responsible Gold Mining Principles and the Guidance on the Guidance on implementing and assuring the RGMPs: Supplement to the Assurance Framework.

#### **Verification Procedures**

We planned and carried out work aimed at obtaining all the necessary evidences, information and explanations related to the above scope. These procedures include:

 $\cdot$  Ask the executives to find out about the company's processes and whether there are provisions for risk management

• Interview with staff responsible for the implementation of processes at the company level and in the selected mines and with those responsible for the preparation of RGMPs Report

• Assess whether the policies, procedures and internal controls implemented by the company contribute to comply with the requirements of the Principles

• Visit the following currently operating mines, which were selected taking into account the risk profile of these mines:Liba Gold Mine, Luoba Town, Lixian, Longnan City, Gansu Province, China

• Conduct desktop analysis of the policies, procedures and internal controls implemented at the mine site to understand compliance at the following mine site: Liba Gold Mine, Luoba Town, Lixian, Longnan City, Gansu Province, China

Others

#### Limitations

Conformity to the Verification objective as an objective is characterized by its inherent limitations and is more suitable to qualitative assessment, unlike the methods used to assess financial information. The lack of effective methods to assess and measure non-financial information allows for different but acceptable measurement methods. However, these methods may affect the comparability of situations between entities and over time.

#### Statement on Independence and Verification Capability

TÜV SÜD is a trusted partner of choice for safety, security, and sustainability solutions. It specializes 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 adheres to the rules of professional conduct/codes of ethics related to the business of verification, which are founded on the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

TÜV SÜD and Zijin Mining are two entities independent of each other and both TÜV SÜD and Zijin Mining and their branches or stakeholders have no conflict of interest, and all the members of the verification team have no business relationship with the company, and the verification is completely neutral.

We hereby confirm that we meet the criteria for assurance providers set out in the Assurance Framework for the Responsible Gold Mining Principles and the Guidance on the Guidance on implementing and assuring the RGMPs: Supplement to the Assurance Framework issued by the World Gold Council.

#### **Description of the statement**

This statement is intended to provide limited verification of Zijin Mining's compliance with the World Gold Council's Responsible Gold Mining Principles and is intended solely for the purpose of Zijin Mining's Report of its performance in accordance with the applicable standards set out in the Responsible Gold Mining Principles and is not intended to be suitable for any other purpose. This report does not assume any responsibility or liability to any third party, including the World Gold Council.

#### Signature:

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

Zhu Wenjun TÜV SÜD Sustainability Authorized Signatory Officer March 12th, 2024 Shanghai, China

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

# Indexes

# **GRI Content Index**

GRI Standard	Disclosure	Pages	Explanation
General Disclosur	es		
	Disclosure 2-1 Organizational details	P5-6	
The organization	Disclosure 2-2 Entities included in the organization's sustainability reporting	P93	
and its reporting practices	Disclosure 2-3 Reporting period, frequency and contact point	P93,P111	
P	Disclosure 2-4 Restatements of information	P95	
	Disclosure 2-5 External assurance	P100-P103	
	Disclosure 2-6 Activities, value chain and other business relationships	P7	
Activities and workers	Disclosure 2-7 Employees	P61-66	
	Disclosure 2-8 Workers who are not employees	P61-66	
	Disclosure 2-9 Governance structure and composition	P15-18	
	Disclosure 2-10 Nomination and selection of the highest governance body	P15	
	Disclosure 2-11 Chair of the highest governance body	P2,P15-17	
	Disclosure 2-12 Role of the highest governance body in overseeing the management of impacts	P15-18	
	Disclosure 2-13 Delegation of responsibility for managing impacts	P15-18	
	Disclosure 2-14 Role of the highest governance body in sustainability reporting	P15-18	
	Disclosure 2-15 Conflicts of interest	P15-18	
	Disclosure 2-16 Communication of critical concerns	P15-18	
Governance	Disclosure 2-17 Collective knowledge of the highest governance body	P15-18	
	Disclosure 2-18 Evaluation of the performance of the highest governance body	P15-18	
	Disclosure 2-19 Remuneration policies	P16	
	Disclosure 2-20 Process to determine remuneration	P16	
	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 compensatio of the Company

GRI Standard	Disclosure	Pages	Explanation
	Disclosure 2-22 Statement on sustainable development strategy	P2-3	
	Disclosure 2-23 Policy commitments	P5,P93	
	Disclosure 2-24 Embedding policy commitments	P77	
Strategy, policies	Disclosure 2-25 Processes to remediate negative impacts	P23-28,P84	
and practices	Disclosure 2-26 Mechanisms for seeking advice and raising concerns	P22,P77-78	
	Disclosure 2-27 Compliance with laws and regulations	-	Please refer to our 2023 Annual Report
	Disclosure 2-28 Membership associations	P5	
Stakeholder	Disclosure 2-29 Approach to stakeholder engagement	P12-13,P77- 78,P112	
engagement	Disclosure 2-30 Collective bargaining agreements	P25	
Material Topics			
	Disclosure 3-1 Process to determine material topics	P12-13	
Material Topics 2021	Disclosure 3-2 List of material topics	P12-13	
	Disclosure 3-3 Management of material topics	P13	
	Disclosure 3-3 Management of material topics	P75-77	
Economic Performance 2016	Disclosure 201-1 Direct economic value generated and distributed	P79	
	Disclosure 201-2 Financial implications and other risks and opportunities due to climate change	P53-54	
	Disclosure 201-2 Financial implications and other risks and opportunities due to climate change	P75-77	
ndirect Economic mpacts 2016	Disclosure 203-1 Infrastructure investments and services supported	P78-85	
	Disclosure 203-2 Significant indirect economic impacts	P75-85	
Procurement	Disclosure 201-2 Financial implications and other risks and opportunities due to climate change	P89	
Practices 2016	Disclosure 204-1 Proportion of spending on local suppliers	P89	
Anti-corruption 2016	Disclosure 3-3 Management of material topics	P19-22	
	Disclosure 205-1 Operations assessed for risks related to corruption	P21	
	Disclosure 205-2 Communication and training about anti- corruption policies and procedures	P21	
	Disclosure 205-3 Confirmed incidents of corruption and actions taken	P21	

GRI Standard	Disclosure	Pages	Explanation
Anti-competitive	Disclosure 3-3 Management of material topics	P19-22	
Behavior 2016	Disclosure 206-1 Legal actions for anti-competitive behavior, anti- trust, and monopoly practices	P19-22	
Tax 2019	Disclosure 3-3 Management of material topics		Please refer to our Annua Report 2023 and website
10,72015	Disclosure 207-4 Country-by-country reporting		Please refer to our Annual Report 2023
Materials 2016	Disclosure 3-3 Management of material topics	P90	
Water lais 2010	Disclosure 301-1 Materials used by weight or volume	P90	
	Disclosure 3-3 Management of material topics	P55	
	Disclosure 302-1 Energy consumption within the organization	P59	
Energy 2016	Disclosure 302-3 Energy intensity	P58-59	
	Disclosure 302-4 Reduction of energy consumption	P56-59	
	Disclosure 302-5 Reductions in energy requirements of products and services	P56-59	
	Disclosure 3-3 Management of material topics	P33-38	
	Disclosure 303-1 Interactions with water as a shared resource	P33-34	
Water and Effluents 2018	Disclosure 303-2 Management of water discharge-related impact	P37-38	
	Disclosure 303-3 Water withdrawal	P35-36	
	Disclosure 303-4 Water discharge	P37-38	
	Disclosure 3-3 Management of material topics	P42	
Biodiversity 2016	Disclosure 304-2 Significant impacts of activities, products and services on biodiversity	P42	
	Disclosure 304-3 Habitats protected or restored	P40	
	Disclosure 3-3 Management of material topics	P52-59	
	Disclosure 305-1 Direct (Scope 1) GHG emissions	P58	
	Disclosure 305-2 Energy indirect (Scope 2) GHG emissions	P58	
Emissions 2016	Disclosure 305-4 GHG emissions intensity	P58	
	Disclosure 305-5 Reduction of GHG emissions	P58	
	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	P47	

GRI Standard	Disclosure	Pages	Explanation
	Disclosure 3-3 Management of material topics	P44-48	
	Disclosure 306-1 Waste generation and significant waste-related impacts	P44	
Waste 2020	Disclosure 306-2 Management of significant waste-related impacts	P44-48	
	Disclosure 306-3 Waste generated	P45-47	
	Disclosure 306-4 Waste diverted from disposal	P45-47	
	Disclosure 306-5 Waste directed to disposal	P45-47	
Environmental	Disclosure 3-3 Management of material topics	P30-32	
Compliance 2016	Disclosure 307-1 Non-compliance with environmental laws and regulations	P31-32	
	Disclosure 3-3 Management of material topics	P86-89	
Supplier Environmental Assessment 2016	Disclosure 308-1 New suppliers that were screened using environmental criteria	P88	
ASSESSMENT 2016	Disclosure 308-2 Negative environmental impacts in the supply chain and actions taken	P88	
	Disclosure 3-3 Management of material topics	P61-62	
Employment 2016	Disclosure 401-1 New employee hires and employee turnover	P64	
	Disclosure 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	P64	
Labor/Management	Disclosure 3-3 Management of material topics	P25	
Relations 2016	Disclosure 402-1 Minimum notice periods regarding operational changes	P25	
	Disclosure 3-3 Management of material topics	P67-73	
	Disclosure 403-1 Occupational health and safety management system	P67	
	Disclosure 403-2 Hazard identification, risk assessment, and incident investigation	P67-68	
	Disclosure 403-3 Occupational health services	P69-70	
Occupational Health and Safety 2018	Disclosure 403-5 Worker training on occupational health and safety	P69	
	Disclosure 403-6 Promotion of worker health	P69-70	
	Disclosure 403-8 Workers covered by an occupational health and safety management system	P67-73	
	Disclosure 403-9 Work-related injuries	P72	
	Disclosure 403-10 Work-related ill health	P69-70	

GRI Standard	Disclosure	Pages	Explanation
	Disclosure 3-3 Management of material topics	P65	
	Disclosure 404-1 Average hours of training per year per employee	P65-66	
Training and Education 2016	Disclosure 404-2 Programs for upgrading employee skills and transition assistance programs	P65-66	
	Disclosure 404-3 Percentage of employees receiving regular performance and career development reviews	P64-66	
Diversity and Equal Opportunity	Disclosure 3-3 Management of material topics	P63	
2016	Disclosure 405-1 Diversity of governance bodies and employees	P16,P63	
Non-discrimination	Disclosure 3-3 Management of material topics	P25	
2016	Disclosure 406-1 Incidents of discrimination and corrective actions taken	P25	
Freedom of Association and Collective Bargaining 2016	Disclosure 3-3 Management of material topics	P25	
	Disclosure 3-3 Management of material topics	P25	
Child Labor 2016	Disclosure 408-1 Operations and suppliers at significant risk for incidents of child labor	P25	
Forced or	Disclosure 3-3 Management of material topics	P25	
Compulsory Labor 2016	Disclosure 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	P25	
Security Practices	Disclosure 3-3 Management of material topics	P28	
2016	Disclosure 410-1 Security personnel trained in human rights policies or procedures	P28	
Rights of Indigenous Peoples 2016	Disclosure 3-3 Management of material topics	P26	
	Disclosure 3-3 Management of material topics	P28	
Human Rights Assessment 2016	Disclosure 412-1 Operations that have been subject to human rights reviews or impact assessments	P28	
	Disclosure 412-2 Employee training on human rights policies or procedures	P25	
Local Communities	Disclosure 3-3 Management of material topics	P75-85	
2016	Disclosure 413-1 Operations with local community engagement, impact assessments, and development programs	P76	

GRI Standard	Disclosure	Pages	Explanation
	Disclosure 3-3 Management of material topics	P88	
Supplier Social Assessment 2016	Disclosure 414-1 New suppliers that were screened using social criteria	P88	
2010	Disclosure 414-2 Negative social impacts in the supply chain and actions taken	P87-88	
	Disclosure 3-3 Management of material topics	P90	
Customer Health and Safety 2016	Disclosure 416-1 Assessment of the health and safety impacts of product and service categories	P90	
	Disclosure 416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	P90	
	Disclosure 3-3 Management of material topics	P90	
Marketing and	Disclosure 417-1 Requirements for product and service information and labeling	P90	
Labeling 2016	Disclosure 417-2 Incidents of non-compliance concerning product and service information and labeling	P90	
	Disclosure 417-3 Incidents of non-compliance concerning marketing communications	P90	
Customer	Disclosure 3-3 Management of material topics	P91	
Privacy 2016	Disclosure 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	P91	
Socioeconomic	Disclosure 3-3 Management of material topics		Please refer to our Annual Report 2023
Compliance 2016	Disclosure 419-1Non-compliance with laws and regulations in the social and economic area		Please refer to our Annual Report 2023

# **HKEX Index**

Index	Subject Areas, Aspects, General Disclosures and KPIs	Pages
	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	P30-32 P35 P45-46
Aspect A1 :	KPI A1.1 The types of emissions and respective emissions data.	P37 P45-47
Emissions	KPIA1.2 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).	P58-59
	KPIA1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P47
	KPIA1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P46
	KPI A1.5 Description of emissions target(s) set and steps taken to achieve them.	P44-48 P56-59
	KPI A1.6 Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	P45-47
	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.	P35-38 P44-48 P56-59
	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).	P58
Aspect A2: Use of	KPI A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P35-38
Resources	KPI A2.3 Description of energy use efficiency target(s) set and steps taken to achieve them.	P35-38 P44-48 P56-59
	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.	P33-38
	KPI A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	P90
Aspect A3: The Environment	General Disclosure Policies on minimising the issuer's significant impacts on the environment and natural resources.	P39-43
and Natural Resources	KPI A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P39-43

Index	Subject Areas, Aspects, General Disclosures and KPIs	Pages
Aspect A4:	General Disclosure Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P53-54
Climate Change	KPI A4.1 Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	P53-58
Employment a	nd Labour Practices	
Aspect B1 :	General Disclosure relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer	P61-62
Employment	KPI B1.1 Total workforce by gender, employment type (for example, full- or part- time), age group and geographical region.	P63
	KPI B1.2 Employee turnover rate by gender, age group and geographical region.	P64
	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.	P67-6
Aspect B2: Health and Safety	KPI B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P72
	KPI B2.2 Lost days due to work injury.	P72
	KPI B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	P68-7
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.	P65-6
	KPI B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P66
	KPI B3.2 The average training hours completed per employee by gender and employee category.	P66

Index	Subject Areas, Aspects, General Disclosures and KPIs	Pages
Aspect B4:	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.	P25
Labour Standards	KPI B4.1 Description of measures to review employment practices to avoid child and forced labour.	P25
	KPI B4.2 Description of steps taken to eliminate such practices when discovered.	P25
	General Disclosure Policies on managing environmental and social risks of the supply chain.	P86-87
	KPI B5.1 Number of suppliers by geographical region.	P88
Aspect B5: Supply Chain	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.	P87-88
Management	KPI B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P87-88
	KPI B5.4 Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P87-88
	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.	P90
A set of DC	KPI B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	P90
Aspect B6: Product Responsibility	KPI B6.2 Number of products and service related complaints received and how they are dealt with.	P90
	KPI B6.3 Description of practices relating to observing and protecting intellectual property rights.	P91
	KPI B6.4 Description of quality assurance process and recall procedures.	P90
	KPI B6.5 Description of consumer data protection and privacy policies, and how they are implemented and monitored.	P91
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.	P21

Index	Subject Areas, Aspects, General Disclosures and KPIs	Pages
Aspect B7 :	KPI B7.2 Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	P22
Anti-corruption	KPI B7.3 Description of anti-corruption training provided to directors and staff.	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.	P75-77
	KPI B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P77-85
	KPI B8.2 Resources contributed (e.g. money or time) to the focus area.	P79

## **TCFD Index**

Disclosure		Pages
Governance	Describe the board's oversight of climate-related risks and opportunities.	P52
	Describe management's role in assessing and managing climate-related risks and opportunities.	P52
Strategy	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	P53-54
	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	P53-54
	Describe the resilience of the organization's strategy, taking into consideration different climate- related scenarios, including a 2°C or lower scenario.	P53-54 P59
Risk management	Describe the organization's processes for identifying and assessing climate-related risks.	P53-54
	Describe the organization's processes for managing climate-related risks.	P53-54
	Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	P18 P53-54
Metrics and targets	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	P53-54
	Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	P58-59
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	P53-54

## IFRS Sustainability Disclosure Standard S2 Index

Core content	content Core content Disclosure requirements		Pages	
Governance	The governance body(s) or individual(s) responsible for oversight of climate-related risks and opportunities, and management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate- related risks and opportunities.	How responsibilities for climate-related risks and opportunities are reflected in the terms of reference, mandates, role descriptions and other related policies applicable to that body(s) or individual(s)		
		how the body(s) or individual(s) determines whetherappropriate skills and competencies are available or will bedeveloped to oversee strategies designed to respond to climate-related risks and opportunities	P30 P52	
		How and how often the body(s) or individual(s) is informed about climate- related risks and opportunities	P30 P52	
		How the body(s) or individual(s) takes into account climate-related risks and opportunities when overseeing the entity's strategy, its decisions on major transactions and its risk management processes and related policies, including whether the body(s) or individual(s) has considered trade-offs associated with those risks and opportunities	P15-18 P30 P52	
		How the body(s) or individual(s) oversees the setting of targets related to climate-related risks and opportunities, and monitors progress towards those targets, including whether and how related performance metrics are included in remuneration policies	P15-18	
Strategy	Entity's strategy for managing climate-related risks and opportunities	The climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects	P53-54	
		The current and anticipated effects of those climate-related risks and opportunities on the entity's business model and value chain		
		The effects of those climate-related risks and opportunities on the entity's strategy and decision-making, including information about its climate- related transition plan	P53-54	
		The effects of those climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period, and their anticipated effects on the entity's financial position, financial performance and cash flows over the short, medium and long term	P53-54	
		The climate resilience of the entity's strategy and its business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities	P53-54	

Core content	Core content	Disclosure requirements	Pages
Risk management	The entity's processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those	The processes and related policies the entity uses to identify, assess, prioritise and monitor climate-related risks, including the inputs and parameters the entity uses; whether and how the entity uses climate- related scenario analysis to inform its identification of climate-related risks; how the entity assesses the nature, likelihood and magnitude of the effects of those risks; whether and how the entity prioritises climate- related risks relative to other types of risk; how the entity monitors climate-related risks; and whether and how the entity has changed the processes it uses compared with the previous reporting period	
	processes are integrated into and inform the entity's overall risk management process	The processes the entity uses to identify, assess, prioritise and monitor climate-related opportunities, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities	P53-55
		The extent to which, and how, the processes for identifying, assessing, prioritising and monitoring climate-related risks and opportunities are integrated into and inform the entity's overall risk management process	P53-54
	The entity's performance in relation to its climate- related risks and opportunities, including progress towards any climate-related targets it has set	Information relevant to the cross-industry metric categories	P56-59
in re Metrics and relat targets prog clima		Industry-based metrics that are associated with particular business models, activities or other common features that characterise participation in an industry	P56-59
		Targets set by the entity	For more details, please refer to ou Climate Change Action Pla

Note: For details of "Strategy" and "Risk Management" in this index table, please refer to the Company's Climate Change Action Plan, and this report only discloses the latest progress during the reporting period.

## **SASB Index**

SASB Code	Accounting Metric	Unit of Measure	Data/Pages
EM-MM-110a.1	Gross global Scope 1 emissions	Metric tons (t)CO <sub>2</sub> e	3,595,000
	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	P52-59

SASB Code	Accounting Metric	Unit of Measure	Data/Pages
	Air emissions of the following pollutants:	N/A	
	(1) CO	Metric tons (t)	0
	(2) NO <sub>x</sub> (excluding N <sub>2</sub> O)	Metric tons (t)	687.19
EM-MM-120a.1	(3) SO <sub>x</sub>	Metric tons (t)	1,348.22
EIVI-IVIIVI-I ZUƏ. I	(4) particulate matter (PM10)	Metric tons (t)	611.51
	(5) mercury (Hg)	Metric tons (t)	0.04
	(6) lead (Pb), and	Metric tons (t)	0.80
	(7) volatile organic compounds (VOCs)	Metric tons (t)	0.51
	(1) Total energy consumed	Gigajoules (GJ)	68,480,860
EM-MM-130a.1	(2) Percentage grid electricity	Percentage (%)	46.71
	(3) Percentage renewable	Percentage (%)	21.48%
	(1) Total fresh water withdrawn	Million cubic meters (m³)	55.47
EM-MM-140a.1	(2) Total fresh water consumed	Million cubic meters (m³)	19.16
	(3) Percentage of each in regions with High or Extremely High Baseline Water Stress	Percentage (%)	13.84
EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number	0
EM-MM-150a.1	Total weight of tailings waste	Metric tons (t)	177.44
EIVI-IVIIVI-150a.1	Percentage recycled	Percentage (%)	23.86
ENA NANA 450- 2	Total weight of mineral processing waste	Metric tons (t)	950.39
EM-MM-150a.2	Percentage recycled	Percentage (%)	14.10
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	P30-32
	Percentage of mine sites where acid rock drainage is:	N/A	
	(1) predicted to occur	Percentage (%)	0
EM-MM-160a.2	(2) actively mitigated, and	Percentage (%)	7.02
	(3) under treatment or remediation	Percentage (%)	8.77
	Percentage of (1) proved and	Percentage (%)	-
EM-MM-160a.3	(2) probable reserves in or near sites with protected conservation status or endangered species habitat	Percentage (%)	-

SASB Code	Accounting Metric	Unit of Measure	Data/Pages
ENA NANA 210- 1	Percentage of (1) proved and	Percentage (%)	-
EM-MM-210a.1	(2) probable reserves in or near areas of conflict	Percentage (%)	-
	Percentage of (1) proved and	Percentage (%)	-
EM-MM-210a.2	(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	P23-28 P75-85
EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	N/A	P75-85
EM-MM-210b.2	Number of non-technical delays	Number	3
=101-101101-2100.2	Duration of non-technical delays	Days	112
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements broken down by local employees	Percentage (%)	76.44
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements broken down by foreign employees	Percentage (%)	25.76
ENA NANA 240- 2	Number of strikes and lockouts	Number	1
EM-MM-310a.2	Duration of strikes and lockouts	Days	3
	(1) MSHA all-incidence rate	Rate	-
	(2) fatality rate	Rate	0.0086
EM-MM-320a.1	(3) near miss frequency rate (NMFR)	Rate	0.18
EIVI-IVIIVI-SZUd. I	(4) a. average hours of health, safety, and emergency response training for full-time employees	Hours	30.33
	(4) b. average hours of health, safety, and emergency response training for contract employees	Hours	64.47
EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	N/A	P19-22
EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Metric tons (t)	-
	(1) Production of metal ores	Metric tons (t) Saleable	P6
EM-MM-000.A	(2) Production of finished metal products	Metric tons (t) Saleable	
	Total number of employees	Number	55,239
EM-MM-000.B	Total number of percentage contractors	Percentage (%)	30,459

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

# **Abbreviations**

Abbreviations	Full name in Chinese	Full name in English /local language	
Zijin Mining	紫金礦業集團股份有限公司	Zijin Mining Group Co., Ltd.	
Zijin Zinc	紫金鋅業有限公司	Zijin Zinc Co., Ltd.	
Duobaoshan Copper Industry	黑龍江多寶山銅業股份有限公司	Heilongjiang Duobaoshan Copper Industry Inc.	
Guizhou Zijin	貴州紫金礦業股份有限公司	Guizhou Zijin Mining Co., Ltd.	
Zijin Copper	紫金銅業有限公司	Zijin Copper Co., Ltd.	
Jilin Zijin Copper	吉林紫金銅業有限公司	Jilin Zijin Copper Co., Ltd.	
Zijin Non-ferrous	紫金有色金屬有限公司	Zijin Non-ferrous Metals Co., Ltd.	
Luoning Zijin	洛寧紫金黃金冶煉有限公司	Luoning Zijin Gold Refinery Co., Ltd.	
FZU Zijin Hydrogen Power	福大紫金氫能科技股份有限公司	FZU Zijin Hydrogen Power Technology Co., Ltd.	
Serbia Zijin Mining	塞爾維亞紫金礦業有限公司	Serbia Zijin Mining Doo Bor	
Serbia Zijin Copper	塞爾維亞紫金銅業有限公司	Serbia Zijin Copper Doo Bor	
AGM	奧羅拉金礦有限公司	AGM Inc.	
Zeravshan	中塔澤拉夫尚有限責任公司	Joint Venture Zeravshan Limited Liability Company	
Altynken	奧同克有限責任公司	Altynken Limited Liability Company	
COMMUS	穆索諾伊礦業簡易股份有限公司	La Compagnie Minière de Musonoie Global Société par Actions Simplifiée	
Continental Gold	大陸黃金有限公司哥倫比亞分公司	Continental Gold Limited Sucursal Colombia	

Abbreviations	Full name in Chinese	Full name in English /local language
Malipo Zijin Tungsten	文山麻栗坡紫金鎢業集團有限公司	Wenshan Malipo Zijin Tungsten Group Co., Ltd.
Bayannur Zijin	巴彥淖爾紫金有色金屬有限公司	Bayannur Zijin Non-ferrous Metals Co., Ltd.
Heilongjiang Zijin Copper	黑龍江紫金銅業有限公司	Heilongjiang Zijin Copper Co., Ltd.
Ashele Copper	哈巴河阿舍勒銅業股份有限公司	Habahe Ashele Copper Co., Ltd.
Longnan Zijin	隴南紫金礦業有限公司	Longnan Zijin Mining Co., Ltd.
RGM	羅斯貝爾金礦有限公司	Rosebel Gold Mines N.V.
Norton	諾頓金田有限公司	Norton Gold Fields Pty Ltd
Hunan Zijin Lithium	湖南紫金鋰業有限公司	Hunan Zijin Lithium Co., Ltd.
Liex	LIEX 有限責任公司	Liex S.A.
West Copper	青海威斯特銅業有限責任公司	Qinghai West Copper Co., Ltd.
Lakkor Resources	西藏阿裏拉果資源有限責任公司	Tibet Ngari Lakkor Resources Co., Ltd.
Luoyang Kunyu	洛陽坤宇礦業有限公司	Luoyang Kunyu Mining Co., Ltd.
Jinbao	金寶礦業有限責任公司	Jinbao Mining Co., Ltd.
Julong Copper	西藏巨龍銅業有限公司	Tibet Julong Copper Co., Ltd.
Hunchun Zijin	琿春紫金礦業有限公司	Hunchun Zijin Mining Co., Ltd.
Río Blanco Copper	秘魯白河銅業股份有限公司	Río Blanco Copper S.A.
Zijin Gold Smelting	紫金礦業集團黃金冶煉有限公司	Zijin Mining Group Gold Smelting Co., Ltd.

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# Please leave us your personal information if it is convenient.

Name/company name/industry: Telephone number/email address:

#### **Our contact:**

ESG Office, Zijin Mining Group Co., Ltd.\* Address: Room 1408, Zijin Headquarters, No. 1 Zijin Road, Shanghang County, Longyan City, Fujian Province Telephone number: 0597-3998038 Postal Code: 364200 Email address: zjky@zjky.cn or international@zijinmining.com

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3. Which 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?



# MINING FOR A BETTER SOCIETY

Zijin Mining Group Co., Ltd.\*

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