



**云南锡业股份有限公司**  
YUNNAN TIN COMPANY LIMITED



# 2023

**Environmental, Social, and  
Governance (ESG) Report**





**云南锡业股份有限公司**

YUNNAN TIN COMPANY LIMITED

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# About This Report

## Report Overview



This is the 16th Environmental, Social, and Governance (ESG) and Social Responsibility Report published by Yunnan Tin Co., Ltd. The report discloses the Company's development practices and major achievements in environmental, social, and corporate governance responsibilities for the year 2023. It aims to provide shareholders, creditors, partners, employees, and other stakeholders with a comprehensive understanding of the Company's social responsibility activities.

The Board of Directors and all directors of the Company guarantee that there are no false records, misleading statements, or significant omissions in this report. They bear individual and joint legal responsibility for the truthfulness, accuracy, and completeness of its contents.

## Time Frame



The report covers the period from January 1, 2023, to December 31, 2023. To enhance the comparability and completeness of the report, some content appropriately refers to previous years and includes relevant post-2023 events.

## Basis for Compilation



SDG Compass

GRI Standards of Global Reporting Initiative

CASS-ESG 5.0

GB/T 36001-2015 Guidance on social responsibility reporting

SASB Standards

Hong Kong Stock Exchange's Environmental, Social and Governance Reporting Guide

Research on Preparation of ESG Special Report of Listed Companies Controlled by Central State-owned Enterprises

Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies

Self-regulatory Guidelines of Shenzhen Stock Exchange for Listed Companies No.1 - Standardized Operation of Main Board Listed Companies

## Report Terminology

Yunnan Tin Co., Ltd. (hereinafter referred to as "Yunnan Tin" or "the Company"); Datun Tin Mine Branch of Yunnan Tin Co., Ltd. (referred to as "Datun Tin Mine"); Laochang Branch of Yunnan Tin Co., Ltd. (referred to as "Laochang Branch");Kafang Branch of Yunnan Tin Co., Ltd. (referred to as "Kafang Branch") ;Tin Branch of Yunnan Tin Co., Ltd. (referred to as "Tin Branch"); Copper Branch of Yunnan Tin Co., Ltd. (referred to as "Copper Branch");Yunnan Hualian Zinc Indium Co., Ltd. (referred to as "Hualian Zinc Indium"); Wenshan Zinc Indium Smelting Co., Ltd. of Yunnan Tin (referred to as "Wenshan Zinc Indium"); Smelting Branch of Yunnan Tin Co., Ltd. (referred to as "Smelting Branch"); Yunnan Tin New Materials Co., Ltd. (referred to as "Yunnan Tin New Materials Co., Ltd.").

## Report Acquisition



This report is published in electronic format and can be accessed on the Shenzhen Stock Exchange website (<http://www.szse.cn>) and the official website of Yunnan Tin Co., Ltd. (<http://www.ytl.com.cn/>).

## Contact Us



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# Responsibility Statement

The year 2023 was marked by an increasingly complex and severe global situation. Intensified geopolitical conflicts, intricate changes in the international landscape, weakened momentum for world economic growth, frequent extreme weather events, record-breaking global high-temperature days, and an escalating climate crisis characterized the year. In this context, the importance of adhering to sustainable development has been underscored. The state has issued a series of top-level designs, such as achieving peak carbon emissions and carbon neutrality, promoting common prosperity, revitalizing rural areas, and ensuring the security of national strategic resources, all in a relentless pursuit of sustainable development actions.

The origins of Tin Co., Ltd. can be traced back to the Guangxu period of the Qing Dynasty, giving it a history of 141 years. The Company has always been a firm believer in sustainable development, convinced that managing its relationship with the environment, solving societal problems, and focusing on long-term corporate governance can unleash boundless potential. Throughout its history, the Company has used ESG as a yardstick to measure value and manage risk, driving itself to adopt effective and sustainable long-term action strategies.

In the past year, in response to Yunnan Province's "3815" strategic development goal, the Company has invested significant energy and time in ESG work. It has actively explored how to better serve ESG through digitalization, how to better integrate ESG into the Company's production and operation, and how to better address societal issues. The Company has prioritized the advancement of intelligent mining and digital smelting, the construction of a large data platform for the tin industry, and the creation of a unified collection, management, analysis, application, and visualization of data across the entire tin industry chain, thereby setting a digital benchmark for the industry. It has ensured the safety of national strategic key minerals such as tin and indium, increased the stability of the tin supply chain, and strived to become a comprehensive, high-quality development listed company that actively integrates into national strategy, demonstrates outstanding innovation ability, and adheres to standardized corporate governance.

As a state-owned holding listed company with Chinese characteristics, the Company continuously optimizes the governance structure of state-owned enterprises, improves the governance mechanism of modern enterprises, strives to enhance the standardized governance level of listed companies, continuously improves the quality of information disclosure, strengthens two-way communication channels with the capital market, enhances communication with investors from multiple dimensions, explores and practices diversified equity financing, optimizes the Company's capital structure, and accelerates the implementation of the "three pillars" of governance: internal control, risk management, and compliance.

Furthermore, the Company has integrated broader environmental issues such as biodiversity, natural resource conservation, and tailings dam safety into its overall sustainable development plan, contributing to the global carbon reduction effort with the power of the tin industry. To fully enhance its sustainable development capabilities, the Company has established a mine management center. It has implemented specialized, professional, modular, and standardized mine management, coordinated the upgrade and transformation of mining mechanization and ore dressing automation, strictly controlled safety and environmental protection risks, fully consolidated responsibilities, and made every effort to solidify the hardware foundation of safety and environmental protection, and enhance the soft power of safety and environmental protection.

Simultaneously, the Company seeks a multi-value win-win situation for all stakeholders, accelerates the improvement of the tin supply chain due diligence management system, promotes transformation and upgrading through technological innovation, concentrates efforts and high-quality resources on tackling key technology problems through key technology breakthroughs and digital transformation upgrades. It insists on building a "ecosystem" of co-construction, sharing, and win-win, actively deepens exchanges and cooperation in the upstream and downstream of the tin industry, promotes the positive development of the industry, and actively seeks measures to improve the quality of products and services to continuously meet customer needs.

The Company explores and pursues a broader boundary of its own social responsibility, including strengthening the training of cadres and talents, promoting the construction of talent echelons, creating a multi-channel career development system for employees, further promoting the inclination of salary distribution to value creators, and striving to create an equal, dignified, and inclusive work environment for employees. It continues to consolidate and expand the achievements of poverty alleviation and effectively connect with rural revitalization, making public welfare an important force in solving sustainable problems.

2024, the macroeconomic operation still faces many challenges. Geopolitical conflicts continue, inflation in developed economies remains high, and the global macro-economy is complex and changeable. ESG is not only a choice to go with the flow, but also an active exploration to create the future. As a listed company in the entire tin industry chain, Yunnan Tin will issue ESG reports every year, disclose the Company's ESG phased objectives, actions, and progress to the public, and continuously promote the Company to become a state-owned holding listed company with higher development quality.

# Introduction to Yunnan Tin

## Company Overview

Yunnan Tin Co., Ltd. (hereinafter referred to as "Yunnan Tin" or "the Company") is a state-owned listed company controlled by Yunnan Tin Group (Holding) Co., Ltd. In 1998, with the approval in the document of YZF [1998] No.99 of the People's Government of Yunnan Province, the Company was established by the Yunnan Tin Company, Gejiu Xidu Nonferrous Metal Processing Factory, Gejiu Yinguan Tin Arts and Crafts Factory, Gejiu Tin Resources Industrial Company, and Gejiu Juyuan Industrial and Mining Company as sponsors.

In October 1999, it was approved by the China Securities Regulatory Commission to issue 130 million RMB ordinary shares to the public for the first time. The Company was listed on the Shenzhen Stock Exchange in February 2000, with the stock referred to as "Yunnan Tin Shares" and the stock code: 000960. It is the only A-share listed company with a complete tin industry chain.

The Company has an integrated industrial structure that spans the entire supply chain of exploration, mining, mineral processing, and smelting of non-ferrous metals such as tin, indium, zinc, and copper. The reserves of tin and indium resources rank first in the world. The Company is a leading enterprise in the world's tin industry, has the largest tin production and processing base in China, possesses the longest and most complete tin industry chain in the world, and represents the leading level of the world's tin industry.

The Company's main products are tin ingots, cathode copper, zinc ingots, die-casting zinc alloy, and indium ingots. Yunnan Tin New Materials Co., Ltd., a significant shareholding enterprise, owns tin materials and tin chemical products. It has formed a production capacity scale of 80,000 tons/year for tin smelting, 125,000 tons/year for cathode copper, 100,000 tons/year for zinc smelting, 30,000 tons/year for die-casting zinc alloy, and 60 tons/year for indium smelting. Yunnan Tin New Materials Co., Ltd., a significant shareholding subsidiary, has a production capacity of 43,000 tons/year of tin materials and 27,100 tons/year of tin chemicals. The "YT" trademark registered in the London Metal Exchange is an internationally renowned brand. The leading product, "Yunnan Tin Brand" refined tin, is a "Chinese famous brand" product exempted from national export quality inspection. The sales volume of tin products has ranked first in the world for 17 years.

## Corporate Vision

### To become

a world-class supplier of key raw materials for non-ferrous metals



### To create

a world-class professional leading demonstration enterprise



### To build

a world-class benchmark enterprise in the tin smelting industry



# Major Events in the Company's Development

## 1883-2006

- 1883**  
The predecessor of the Company was established in the ninth year of the reign of Emperor Guangxu of the Qing Dynasty (1883) with the establishment of the Gejiu Factory Merchants Bureau.
- 1992**  
The "YT" Fine Tin trademark was registered at the London Metal Exchange (LME).
- 1998**  
With the approval of the People's Government of Yunnan Province, Yunnan Tin Company, Gejiu Tin Capital Industrial Company, Gejiu Xidu Nonferrous Metal Processing Plant, Gejiu Juyuan Industrial and Mining Company, and Gejiu Yinguan Tin Arts and Crafts Factory jointly initiated the establishment of Yunnan Tin Co., Ltd.
- 2000**  
"Yunnan Tin" A shares were listed on the Shenzhen Stock Exchange, with the stock code: 000960.
- 2002**  
The Ausmelt furnace was completed and put into operation, increasing production efficiency by 20 times and setting a world record for the largest tin smelting capacity of an Ausmelt furnace.
- 2005**  
The output of tin metal was 42,720 tons, ranking first among tin production enterprises.
- 2006**  
The Company became one of the first manufacturers of raw materials and devices in line with the EU RoHS directive.

## 2007-2012

- 2007**  
The Company won the title of "Top 100 Best Investor Relations Management in China in 2006".  
The Yunnan Tin brand "YT" was rated as a famous trademark in Yunnan Province.
- 2008**  
The Company ranked among the ten most popular listed companies in Yunnan Province.  
It won the title of Excellent Supplier of Baosteel, was selected as the sample of the Shenzhen Component Index for the first time, was selected as the top 100 of the 10th Taurus Award for Listed Companies in China, and was included in the sample stocks of the Shenzhen 100 Index.
- 2009**  
The Company was appointed by the National Standards Committee to undertake the work of the Secretariat of the Tin and Tin Alloy Working Group (TC243/SC2/WG2) of the Heavy Metal Sub-Technical Committee of the National Nonferrous Metals Standardization Committee, responsible for organizing and mainly undertaking the task of formulating and revising tin industry standards.
- 2010**  
The Company won the 2010 China's Best Wealth Creation IR (Investor Relations Management) Award.
- 2011**  
The Company won the Golden Eagle Award of the 7th Annual Conference of China's Securities Market.
- 2012**  
The Company was selected as one of the top 100 capital brands of listed companies in China in 2012.

## 2013-2019

- 2013**  
The Company won the honor of customer satisfaction enterprise of the China Quality Association.
- 2014**  
The Company won the title of advanced collective in the national non-ferrous metal industry.
- 2015**  
The Company acquired 75.74% of the shares of Hualian Zinc Indium for a price of 3.7 billion.
- 2016**  
The Company became the first state-owned holding listed company in the country to marketize "debt-to-equity".
- 2017**  
The Company was ranked 190th in the list of China's top 500 enterprises published by Fortune.
- 2018**  
The Company implemented the first share repurchase in its history.  
It won the "National Market Quality Credit A-level User Satisfaction Enterprise" certificate (AA user satisfaction level).
- 2019**  
The Company was included in the FTSE Russell Index, S&P Emerging Markets Index, and MSCI Global Three Major Indexes. The Company's business philosophy and development prospects have been fully recognized by global authoritative institutions.

## 2020-2023

- 2020**  
The Company became the first listed company to participate in the market-oriented "debt-to-equity swap" of locally state-owned holdings nationwide. With good business development performance and social responsibility, the Company won the "Best Social Responsibility Listed Company" in the China Listed Company Reputation List.
- 2021**  
The Company's first performance briefing and 2020 annual report performance briefing were successfully selected as the "Excellent Practice Case of the 2020 Annual Report Performance Briefing of Listed Companies" by the China Listed Companies Association along with other 200 listed companies nationwide.
- 2022**  
Shenzhen Information Co., Ltd., a wholly-owned subsidiary of the Shenzhen Stock Exchange, officially launched the National Securities ESG rating. The Company achieved an AA rating and was successfully included in the Shenzhen ESG Benchmark Index and Shenzhen ESG Leading Index.
- 2023**  
The Company was selected into the list of world-class professional leading demonstration enterprises created by the State-owned Assets Supervision and Administration Commission of the State Council; won the "2023 ESG Pioneer Practitioner Case" award; was selected into the "Xinhuanet CN-ESG 2023 Top 100 ESG Listed Companies in China" list.

## Highlights and Key Achievements

# 01

### Company Governance

The Company has organized and participated in **145** investor exchange activities

connecting with **622** institutional investors.

The Company has disclosed **120** pieces of information

Through the interactive platform of the Shenzhen Stock Exchange, the Company has responded to **165** investor inquiries

achieving a response rate of **100%**

More than **11,400** cadres and employees of the Company have received integrity warning education

🏆 The Company has been elected as the Vice President unit of the Council of the Yunnan Association of Listed Companies

🏆 In 2022, the Company won the "Panoramic Investor Relations Gold Award - Best Small and Medium Investor Interaction Award"

🏆 The Company was honored with the "Excellent Practice Case of the Office of the Board of Directors of Listed Companies for the Year 2023" by the China Association for Public Companies

🏆 The Company received China's Excellent Investor Relations "Best Innovation Practice Award"

🏆 The Company won the 19th "New Fortune" Gold Medal Secretary of the Board of Directors

🏆 The Company was awarded the "Golden Wutong" Award for Best Investor Relations Management of Listed Company

🏆 In 2023, the Company achieved a 4A level in the performance evaluation of the secretary of the board of directors of listed companies.

# 02

### Environmental Protection

The Company has protected a green area of approximately **5.483** million square meters

The Company has planted about **1.219** million new trees, shrubs, and vines

Since 2020, the Company has restored an ecological area totaling **616** hectares.

The Company has used clean energy sources such as water, wind, and light, totaling **1.448** billion kilowatt-hours

accounting for **80%** of its energy use

The Company and its subsidiaries conducted **471** ecological environment protection knowledge training sessions

training **32,076** person-times

# 03

### Economic Contribution

The Company operates **71** platforms at or above the provincial and ministerial levels, such as state-level enterprise technology innovation centers

The Company has revised **139** national industry standards

🏆 In 2023, the Company ranked **250**th on the Fortune 500 list of China's listed companies.

The Company has been granted a total of **581** national patents

with **54** new patents added per year

The Company has achieved a customer satisfaction rate of **99.5%**.

🏆 The Company has been selected as one of the 200 enterprises by the State-owned Assets Supervision and Administration Commission of the State Council to create a world-class professional leading demonstration enterprise

🏆 The Company has been awarded the first batch of "Strengthening Sources to Help Enterprises" industry and finance service base by the Shanghai Futures Exchange

# 04

### Social Contribution

Among the registered employees of the Company, there are **652** veterans and **4,930** ethnic minority employees.

The Company has organized **205** activities such as safety oath, launching safety initiatives, and signing safety commitments

🏆 The Company won the "2023 ESG Pioneer Practitioner Case" award

🏆 The Company was selected as one of the "Xinhuanet CN-ESG China's Top 100 ESG Listed Companies in 2023"

The Company has organized **89** emergency drills

with a total of **2,434** people participating and observing the drills

The Company has actively arranged **91** new public welfare posts

The Company directly invested CNY **1.7752** million in the Rural Revitalization Assistance Fund

consumed and helped CNY **478,700** agricultural products

totaling CNY **2.2539** million

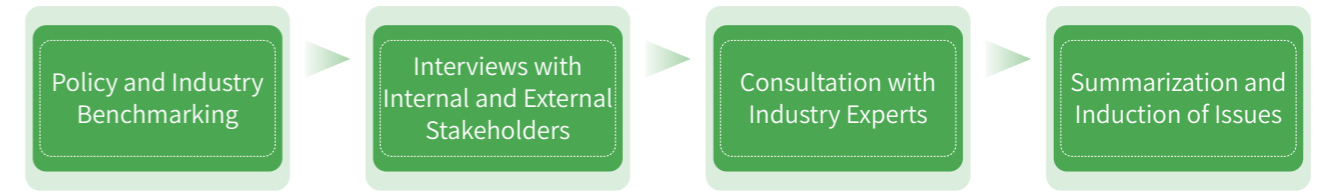
# The Company's Journey Towards Sustainability

## Stakeholder communication

The Company fully acknowledges the importance of considering diverse perspectives when developing and promoting ESG projects. Through continuous communication with stakeholders, the Company establishes key issues related to environmental, social, and corporate governance. The Company firmly believes that advancing sustainable development cannot be achieved without the trust and support of both internal and external stakeholders. The Company continually refines its communication mechanisms, actively engaging with stakeholder groups including government and regulatory authorities, shareholders and senior management, shareholders and investors, customers, media, suppliers, contractors, regulatory bodies, and Company employees. The Company responds to stakeholders' concerns and expectations, striving for a win-win scenario between corporate development and stakeholder satisfaction.

Stakeholders	Expectations and Demands	Communication and Response
 <p>Shareholders and Senior Management</p>	<ul style="list-style-type: none"> <li>Economic Performance</li> <li>Corporate Governance</li> <li>Compliance and Risk Management</li> <li>Business Ethics</li> </ul>	Engagement through General Meeting of Shareholders, Board of Directors, financial reports, business reports, roadshows, and other forms of communication with the Company. Engagement through General Meeting of Shareholders, Board of Directors, financial reports, business reports, roadshows, and other forms of communication with the Company.
 <p>Government and Regulatory Agencies</p>	<ul style="list-style-type: none"> <li>Corporate Governance</li> <li>Business Ethics</li> <li>Environmental Management</li> <li>Waste Discharge</li> </ul>	Regular communication and reporting, institutional research, policy implementation, information disclosure, etc.
 <p>Customers and Suppliers</p>	<ul style="list-style-type: none"> <li>Innovative R&amp;D</li> <li>Supply Chain Management</li> <li>Supply Chain Due Diligence Management</li> <li>Product Quality</li> <li>Privacy and Data Security</li> </ul>	On-site communication, market research, supplier training, transparent procurement, customer satisfaction surveys, etc.
 <p>Employees</p>	<ul style="list-style-type: none"> <li>Employee Rights and Benefits</li> <li>Employee Development and Training</li> <li>Occupational Health and Safety</li> </ul>	Employee activities, employee training, corporate intranet, employee handbook, etc.
 <p>Partners</p>	<ul style="list-style-type: none"> <li>Supply Chain Management</li> <li>Supply Chain Due Diligence Management</li> <li>Technological R&amp;D Innovation</li> <li>Product Quality</li> </ul>	Industry conferences, strategic cooperation, exchange visits, etc.
 <p>Community, public, media, etc.</p>	<ul style="list-style-type: none"> <li>Protection of Ecological Environment</li> <li>Community Public Welfare</li> <li>Investor Relations Management</li> </ul>	Community volunteer activities, social welfare projects, social support projects, etc.

## Materiality Confirmation Process of the Company



## Materiality Analysis

Taking into account annual hot topics, national strategies, industry trends, and the actual development of the Company's business, a materiality survey questionnaire is prepared in line with the requirements of various sustainability disclosure guidelines, the Company adheres to universal standards such as the Global Sustainability Standards Board's "Sustainability Reporting Standards" (GRI Standards) and the Chinese Academy of Social Sciences' "Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises" (CASS-ESG 5.0). In 2023, the Company continued to conduct materiality surveys on sustainable development, serving as a crucial basis for compiling the sustainability report. The Company collected 285 valid questionnaires and organized the survey results. The Company further analyzed the importance of each material issue, selecting the following key sustainability topics that are of high interest to stakeholders and closely related to the Company's sustainable development.

## Materiality Matrix of the Company



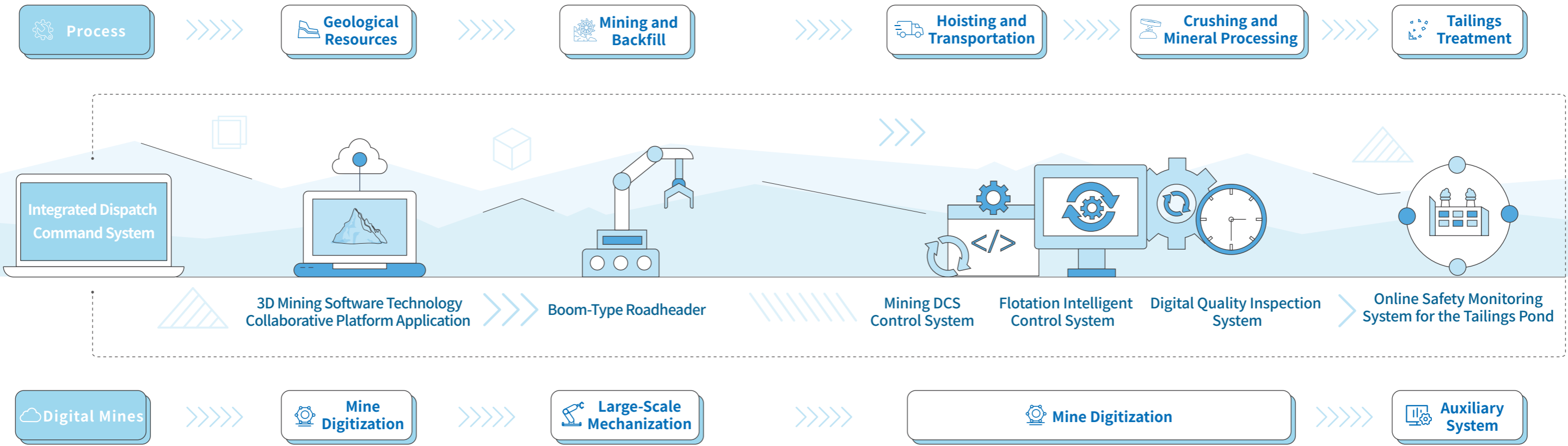
- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1 Construction of Environmental Management System</li> <li>2 Management of Waste and Hazardous Substances</li> <li>3 Protection of Biological Diversity</li> <li>4 Water Resources Management</li> <li>5 Energy Management</li> <li>6 Responding to Climate Change</li> <li>7 Recognition and Response to Climate Risks and Opportunities</li> <li>8 Rights and Interests Protection</li> <li>9 Occupational Health and Safety</li> <li>10 Employee Development and Training</li> <li>11 Employment Promotion</li> <li>12 Employee Compensation and Benefits</li> <li>13 Employee Incentive Policies</li> <li>14 Digital Transformation</li> <li>15 Customer Service</li> </ol> | <ol style="list-style-type: none"> <li>16 Product Quality</li> <li>17 Technological Innovation</li> <li>18 Leading Industry Development</li> <li>19 Supply Chain Due Diligence Management</li> <li>20 Supply Chain Management</li> <li>21 Rural Revitalization</li> <li>22 Community Relations</li> <li>23 Privacy and Data Security</li> <li>24 Corporate Governance</li> <li>25 Anti-Corruption and Business Ethics</li> <li>26 Party Building Management</li> <li>27 Shareholder and Investor Rights</li> <li>28 Legal and Compliant Operation and Internal Control</li> <li>29 Construction of ESG Management System</li> </ol> |
|--|---|



# Leading High Quality Mine Development through Digital Intelligence

Yunnan Tin has proposed the development strategy of "Digital Transformation and Upgrading of the Entire Industry Chain", formulated the "Implementation Plan of Digital Transformation and Upgrading", and adhered to the principle of "Comprehensive Planning, Step-by-Step Implementation". The Company continues to increase investment in information technology, focusing on promoting intelligent mining and intelligent smelting, striving to become a digital benchmark in the industry. With the mine as the foundation and the concentration plant as the support, the Company further promotes key special tasks such as network infrastructure, bottom-layer automation, mine digitization, and production operation informatization, thus empowering high-quality mine development through informatization.

## Intelligent Mine



Application of 3D Mining Software Technology Collaborative Platform

This platform utilizes four major systems: spatial database, system integration platform, tool software, and business process. It integrates data and specialized business operations, providing a unified data management platform for professional technical systems in mine geology, measurement, and mining. This solution addresses the issue of data information silos, significantly reducing data sharing costs and enhancing productivity.



Boom-Type Roadheader

The boom-type roadheader has an average tunneling speed of 1.04 m/h, with a record speed reaching up to 1.54 m/h. Compared to the cost of blasting tunneling, the cost per meter is reduced by 3.2%. This not only enhances tunneling efficiency but also improves the safety of mining construction by replacing the use of explosives, thereby eliminating the risk of blasting injuries and asphyxiation from poisoning. Additionally, the construction causes minimal disturbance to the rock mass, maintaining better rock mass integrity and stability, and reducing the risk of falling pumice causing injuries.



Beneficiation DCS Control System

The production system employs semi-autogenous grinding to replace the traditional "three stages and one closed circuit" grinding process. It introduces advanced equipment such as the DCS control system, flotation intelligent control system, online grade instrument, particle size instrument, large flotation machine, flotation column, and tower mill. This setup realizes the process flow of coarse crushing, grinding, flotation, reagent, metering, remote chain control, and video surveillance. This marks a new chapter of large-scale production process equipment, technological modernization, and intelligent control in the beneficiation workshop.



Flotation Intelligent Control System

For the first time in China, flotation foam analyzer control technology is used to monitor the flotation foam rate and foam size in real time. The flotation operation image is captured through the foam image system, and the flotation operation is stabilized through image system analysis combined with DCS control. Since its implementation, the fluctuation of copper concentrate grade has been reduced by 10%, the grade has increased by 0.5%, the dosage of reagents has been reduced by 5%, and the annual benefit has exceeded CNY 3 million.



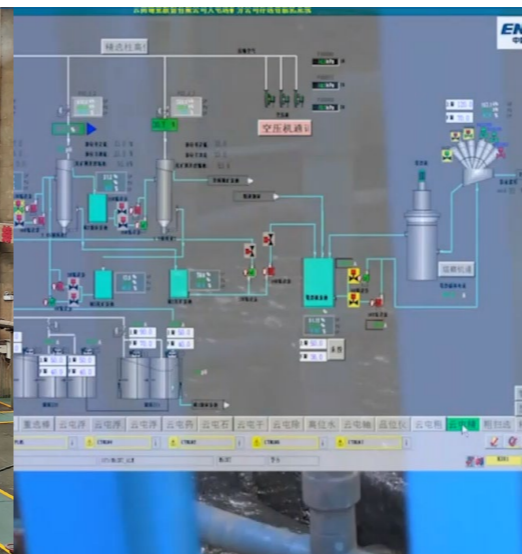
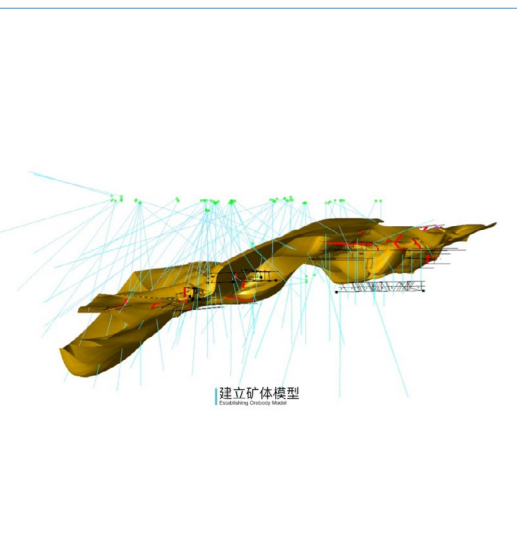
Digital Quality Inspection System

The system relies on industry-standard technical protocols and integrates the functions of an industrial cloud platform, industrial microservices, application and development deployment based on the standard interfaces established among the systems. It applies in a novel way the integration of multiple data sources in three major subsystems: the truck scale automatic weighing system, the mineral processing slurry automatic measurement system, and the quality inspection data management system. This breaks the traditional mineral processing measurement workflow and creatively realizes the digital transformation and application of mine quality inspection work.

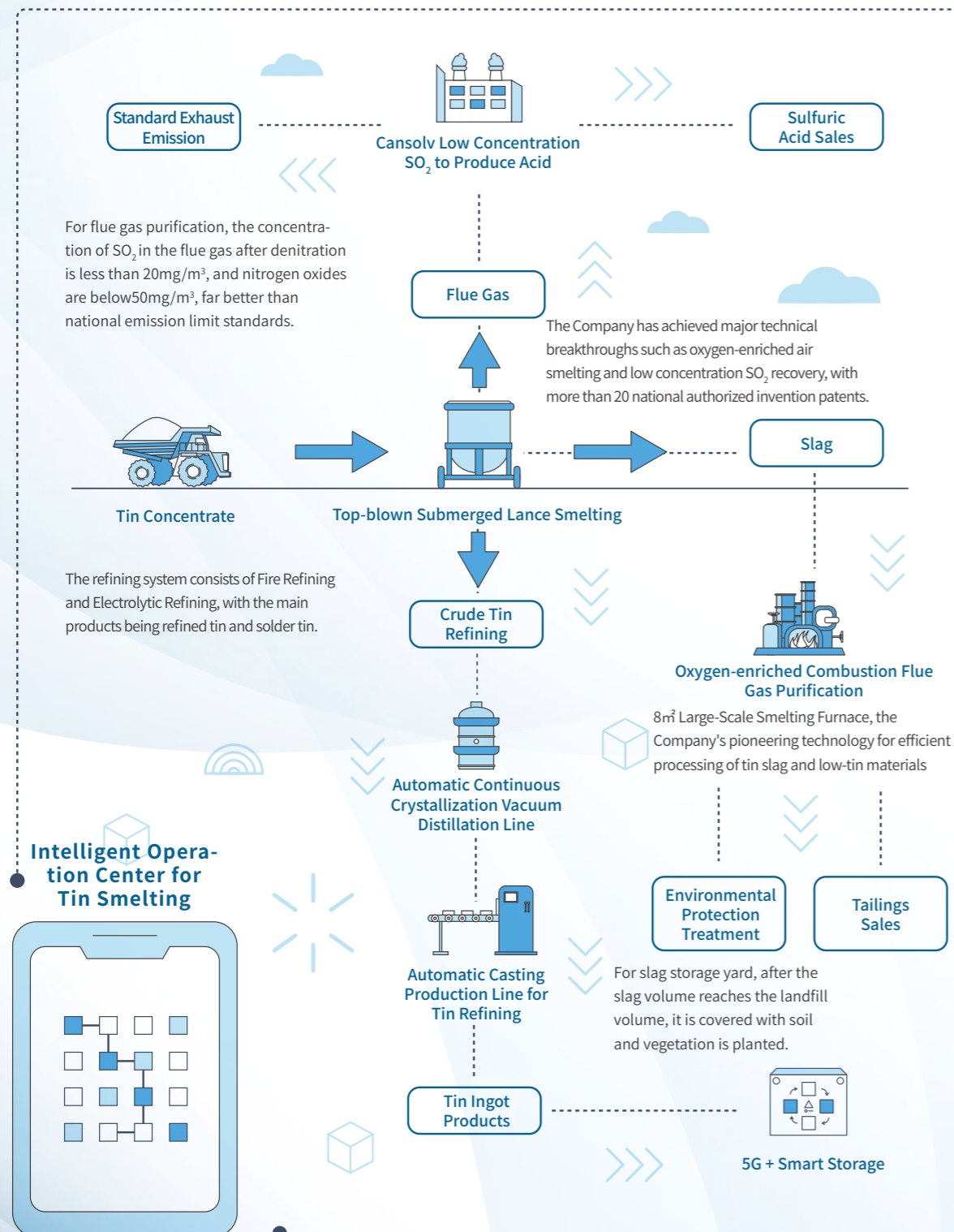


Integrated Dispatch Command System

Through the unified data integration of the underlying support of the private cloud platform and the dispatch center, the Integrated Dispatch Command System can integrate the production process control and monitoring system of the entire mine into the same data center. It realizes comprehensive management of remote command visualization, real-time on-site monitoring, dynamic information display, and centralized production data. Through the means of information technology, the safety of mining is ensured.

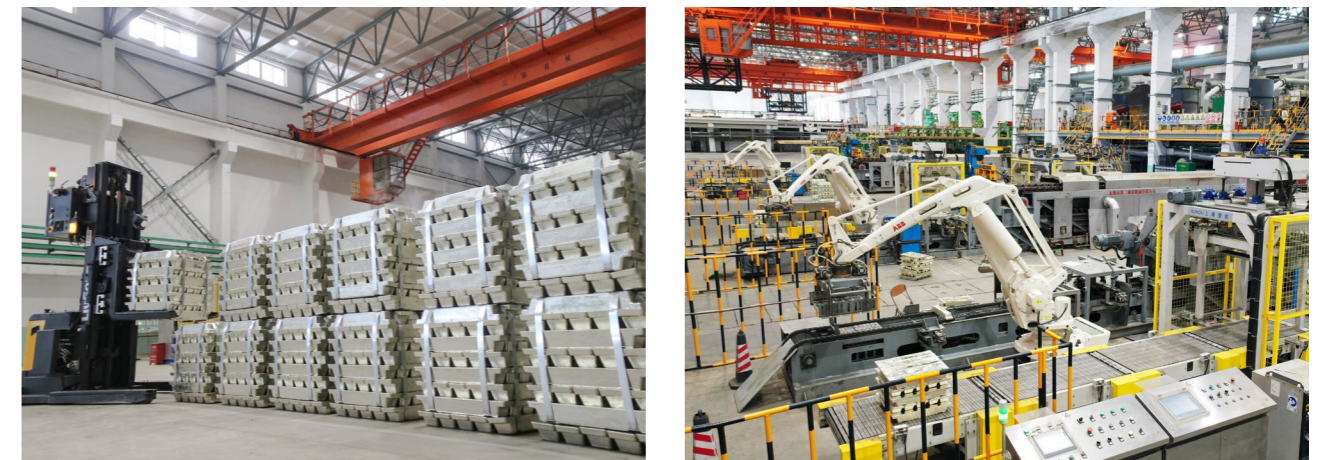


# Digital Smelting Factory



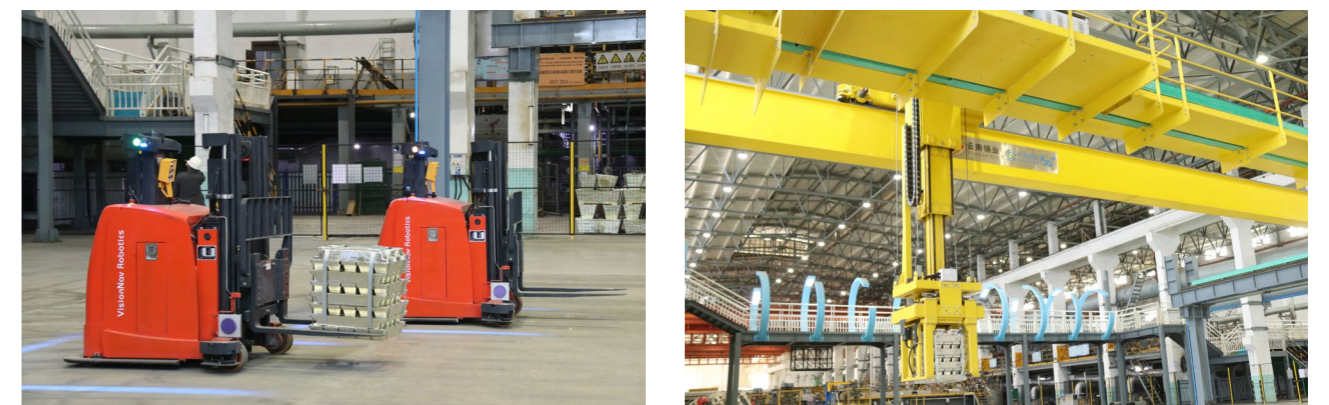
## Automatic Casting Production Line for Tin Refining

Yunnan Tin has built the first fully automatic casting production line in the tin smelting industry. This line has achieved fully automatic precise measurement of ingots, automatic slag scraping by industrial robots, automatic demoulding of tin ingots, precise positioning laser automatic printing of batch number trademarks, automatic arrangement and stacking by fully automatic manipulators, and automatic packaging by fully automatic packers. This completes the intelligent transformation and upgrading of the entire process of tin casting, significantly improving production efficiency while effectively reducing safety risks such as burns and bruises.



## 5G + Tin Ingot Smart Storage Application

Through the integration of 5G, cloud computing, and advanced technology, the smart storage solution for tin ingots has successfully achieved remote unmanned control, significantly improving production efficiency and flexibility. This has helped to increase the storage efficiency of tin ingots by more than 80%, inventory efficiency by 30%, and inventory accuracy by 15%. The solution adopts innovative combinations such as 5G + panel conveyor, AGV, RGV, dispatching bridge, and handling mechanical arm. This successfully achieves unmanned storage of high-risk links and fewer people in key areas, setting a benchmark for the construction of intelligent factories and digital management in the non-ferrous metal industry.



## Intelligent Operation Center for Tin Smelting

The Intelligent Operation Center adopts an industrial Internet architecture, driven by data and centered around business processes. It visualizes the entire process of production monitoring screens, production and operation data, energy information, equipment status, alarm information, and dispatching information. This enables centralized monitoring of workshop process sections and production business departments, integrating all essential production resources, and achieving unified command of production scheduling.

## Tin Industry Big Data Platform, Digital Transformation and Upgrade with ERP as the Core Case

Yunnan Tin has established a network security and informatization leadership group. Each subsidiary unit has set up corresponding organizations. With ERP as the core, the Company has accelerated the application research of digital transformation and upgrading of the manufacturing industry (ERP Phase I and II). Following the implementation strategy of "overall planning, step-by-step implementation, pilot first, and gradual deepening", the Company has achieved full coverage of its core business.

The ERP system comprehensively constructs the digitization of human resources core management, company financial accounting and consolidation, core value chain of main industries, and decision-making system. It realizes the full coverage of the integrated management of the entire process of production, supply, marketing, and trade of the Company's core production and trade units. With real-time business data of core production and operation management, it drives to improve the Company's efficient and scientific decision-making ability and benchmarking management ability.



## Steady Operation and Laying a Solid Foundation for Development

Yunnan Tin focuses on continuously improving the governance level of modern enterprises. Through continuous optimization of governance institutions and operation systems, it continuously strengthens professional governance ability and management level, builds a good governance system, continuously accelerates the pace of reform, transformation, and upgrading, actively plays the leading role of state-owned enterprises, and deepens the exploration of the great practice of the modern enterprise system with Chinese characteristics.

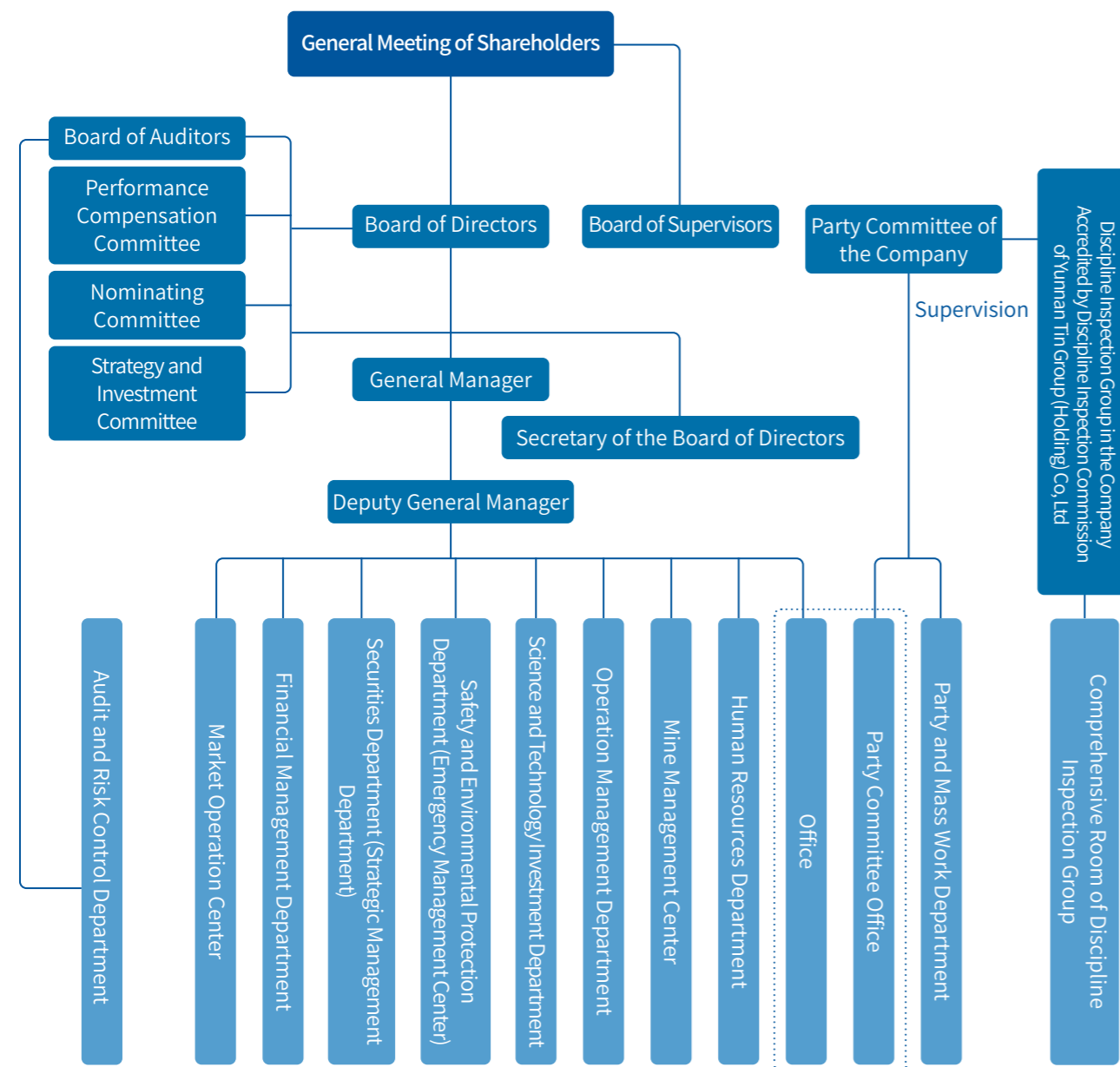
Corresponding SDGs:



# Corporate Governance

Yunnan Tin strictly abides by the requirements of laws and regulations such as the Company Law, the Securities Law, and the Code of Corporate Governance for Listed Companies. It constantly improves the corporate governance structure and establishes the "four mechanisms and one echelon" decision-making system comprising the General Meeting of Shareholders, Board of Directors, Board of Supervisors, Party Committee, and the management. It effectively implements internal governance systems such as the Articles of Association, the Rules of Procedure for the General Meeting of Shareholders, the Rules of Procedure for the Board of Directors, and the Rules of Procedures for the Board of Supervisors, thereby standardizing the organization of the three meetings. During the reporting period, the Company successfully completed the election of the ninth session of the Board of Directors and the Board of Supervisors, ensuring the smooth transition of the Board of Directors and the Board of Supervisors, and ensuring the compliant operation of corporate governance.

## Organizational Structure of the Company



# Operation of Three Mechanisms

## General Meeting of Shareholders

The General Meeting of Shareholders is the highest governance body of Yunnan Tin. The Company strictly adheres to the relevant provisions and requirements of the Company Law, the Articles of Association, and the Rules of Procedure for the General Meeting of Shareholders. It ensures that all shareholders, especially minority shareholders, can enjoy equal status and fully exercise their legitimate rights.

**2023**  
Key Performance

During the reporting period, the Company held **5** General Meeting of Shareholders and passed **27** resolutions.

## Board of Directors

The Board of Directors of the Company has deliberated and made decisions on significant matters of the Company in strict accordance with the terms of reference stipulated in the Articles of Association. The notice, convening, and voting methods of the meeting were in compliance with the requirements of the Company Law and the Articles of Association. The minutes of the meeting were complete and standardized. All directors were able to carry out their work in accordance with relevant laws and regulations, attend the board of directors and General Meeting of Shareholders, perform their duties and obligations diligently and dutifully, actively participate in relevant training and learning, familiarize themselves with relevant laws and regulations, and improve their ability to perform their duties.

**2023**  
Key Performance

During the reporting period, the Board of Directors of the Company held a total of **9** meetings, including **5** on-site meetings and **4** interim board meetings held by way of communication voting. A total of **62** resolutions were considered and passed. Besides, **9** independent board meetings were held, and **34** resolutions were considered and passed.

### Procedure for Election of Directors

<b>Candidate Proposal</b>	The Board of Directors, the Board of Supervisors, and the shareholders who individually or jointly hold more than 3% of the Company's shares shall put forward proposals for director candidates to the Company.	
<b>Review and Self-Examination</b>	The Nomination Committee of the Board of Directors reviews and gives opinions on the qualifications of the relevant director candidates, and the director candidates conduct self-inspection on their qualifications.	
<b>Deliberation by the General Meeting of Shareholders</b>	The director candidates attend the meeting in person, and explain their performance ability, professional ability, working experience, violations of laws and regulations, and whether there is any conflict of interest with the listed company.	
<b>Review by Stock Exchange</b>	The qualifications of independent directors are submitted to the Shenzhen Stock Exchange for review	
<b>Voting at General Meetings</b>	The elected directors are determined in the order of the number of votes obtained.	

### Committees under the Board of Directors

The board of directors of the Company has established four specialized committees: Strategy and Investment, Audit, Performance Compensation, and Nomination. Each specialized committee of the Board of Directors performs its duties in accordance with the Articles of Association and the procedural rules of each committee, free from interference by other departments or individuals within the Company. Each specialized committee diligently studies relevant important matters according to their respective responsibilities. They fully utilize the functions of the specialized committees, strengthen the performance of the Audit Committee, and play a crucial role in the reasonable and scientific decision-making of the Board of Directors. They also enhance the performance of independent directors, fully utilizing the important role of independent directors to protect the legitimate rights and interests of all stakeholders.

2023  
Key Performance


During the reporting period, the Audit Committee held **8** meetings and passed a total of **28** resolutions; the Strategy and Investment Committee held **5** meetings and passed **8** resolutions; the Performance Compensation Committee held **3** meetings and passed **3** resolutions; the Nomination Committee held **4** meetings and passed a total of **8** resolutions.

### Board of Supervisors

The Company strictly adheres to the requirements of relevant laws and regulations such as the Articles of Association and implements the relevant procedures for the election of the Board of Supervisors. The Board of Supervisors actively exercises its supervisory duties, is accountable to the General Meeting of Shareholders, supervises the legality of the Company's financial affairs and the performance of duties by the Company's directors and senior management, and pays attention to key matters such as hedging and related party transactions, effectively safeguarding the legitimate rights and interests of the Company and its shareholders.

2023  
Key Performance

During the reporting period, the Supervisory Committee of the Company held a total of **9** meetings, including **5** on-site meetings and **4** interim meetings held by way of communication voting. A total of **33** resolutions were considered and passed.



### Structure of the Board of Directors

The effectiveness, independence, diversity, and professionalism of the Board of Directors' operation are the goals that the Company strives to achieve. The Company works to promote diversity on the Board of Directors in terms of professional skills, industry experience, professional background, gender, and culture, to foster diverse development.

During the reporting period, in accordance with the relevant provisions of the newly revised "Measures for the Management of Independent Directors", the Company conducted a comparative review of the current tenure of its independent directors. It initiated the revision of relevant systems such as the Articles of Association, the Working System of Independent Directors, the Working Rules of Special Committees of the Board of Directors, and the Authorization Management Measures of the Board of Directors. These systems have been implemented following the decision-making procedures of the Board of Directors and the General Meeting of Shareholders, further enhancing the Company's governance capability and the level of standardized operation.

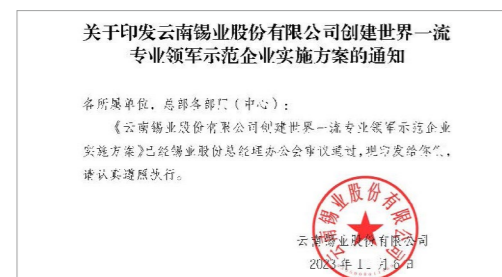
The Company has appointed three independent directors and one employee director, accounting for approximately 44% of the board seats. To enhance the role of independent directors and improve the governance level of listed companies, the Company has established and improved the independent director pool. It has hired personnel with industry, financial, and legal backgrounds to serve as independent directors of the ninth Board of Directors of the Company. Leveraging their professional expertise, independent directors provide opinions on major issues such as company strategy, standardized operation, operation and management, and risk internal control at the General Meeting of Shareholders, Board of Directors, and special committees. This forms internal checks and balances within the Board of Directors, further improving the corporate governance structure and standardized operation of the Company, and enhancing the scientific and professional decision-making of the Board of Directors.

Number of Board Members	1	2	3	4	5	6	7	8
Gender	Female		Male					
Category	Independent Director			Non-Independent Director				
Age Group	Over 50 and under 60 years old			Under 50 years old				
Skills, Knowledge, and Experience	<ul style="list-style-type: none"> <li>Non-ferrous metal mining, smelting, down-stream processing, supply chain, and enterprise management</li> <li>Relevant experience as a board secretary and enterprise management</li> <li>Non-ferrous metals smelting and enterprise management</li> <li>Accounting, financial education, and financial management</li> <li>Legal education and legal services</li> <li>Marketing and enterprise management</li> <li>Finance and strategic development</li> <li>Non-ferrous metals industry analysis and finance</li> </ul>							

## Lean Management

To deepen the important content of the four special actions of "Creating Demonstrations, Enhancing Management, Creating Value, and Leading Brands", the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council has launched a unified deployment to create world-class professional leading demonstration enterprises. By deepening the creation of demonstrations and setting benchmarks, it has accelerated the construction of a number of world-class professional leading enterprises with outstanding specialties, innovation-driven, lean management, and distinctive characteristics.

In March 2023, the Company was selected into the "List of Establishing World-class Demonstration Enterprises and Professional Leading Demonstration Enterprises" in response to the national call, and formulated the implementation plan for establishing world-class professional leading demonstration enterprises. In addition, the Company has carried out relevant training on the establishment of world-class professional leading demonstration enterprises, and cooperated with well-known universities to jointly carry out research on world-class enterprise innovation projects. The Company focuses on promoting enterprises to improve core competitiveness and enhance core functions from all aspects, and is making unremitting efforts to achieve sustainable development and maximize brand value.



Selected to create a world-class leading demonstration enterprise and training

## Investor Relations Management

The Company pays attention to protecting the interests of investors. Through compliance information disclosure, active communication, and interaction with investors through multiple channels and platforms, the Company establishes good investor relations and shares the fruits of enterprise development with investors.

### Investor Management

The Company continues to carry out investor relations activities through various ways and dimensions, and displays the Company's development strategy, business performance, business highlights, and other market concerns through a variety of means. In terms of communication frequency and efficiency, the Company has continuously improved the timeliness of interaction in its work. In principle, investors will be replied within 24 hours after asking questions on the interactive platform. For matters such as the number of shareholders concerned by individual investors, in principle, the Company will reply before the opening of the market on the day of data acquisition, so as to meet the demands of small and medium investors in a timely manner.

In addition, guided by the needs of investors, the Company actively discloses and communicates relevant information that is conducive to enhancing investors' understanding of the Company and continuously improving the quality of information disclosure. The Company attaches great importance to investor briefings, fully communicates with investors, and adopts reasonable suggestions to meet the reasonable demands of investors to the greatest extent, contributing value to creating a fair and just investment environment.

### Investor Communication Channels and Key Performance Data

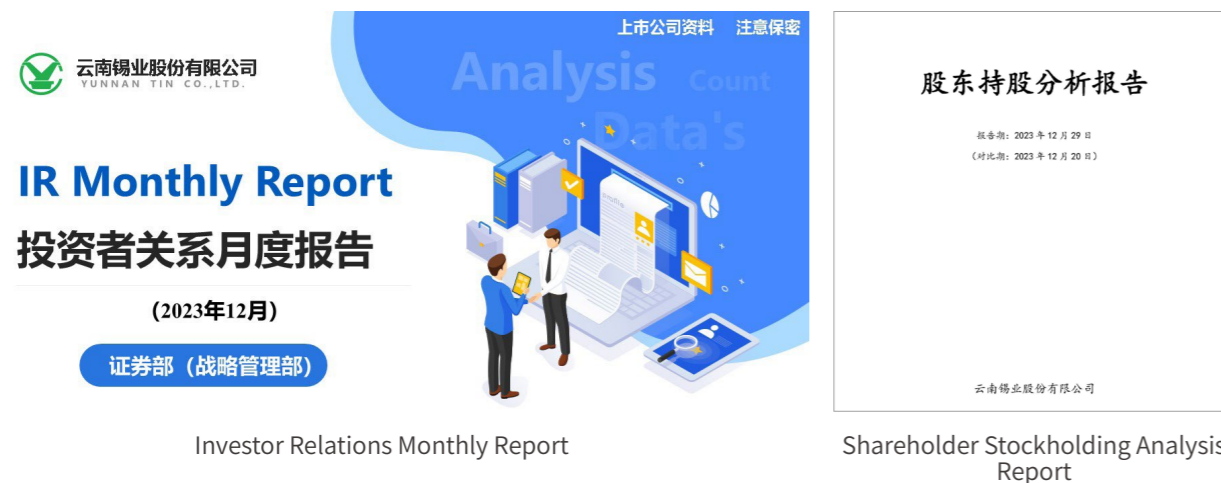
The Company has received <b>137</b> calls from investors	The Company has held <b>52</b> one-on-one conference calls.	The Company responded to <b>165</b> investor inquiries on the Shenzhen Stock Exchange's "EasyInteraction" platform.
The Company has engaged with <b>622</b> institutional and individual investors.	The Company has hosted <b>12</b> on-site investor research or visit activities.	The Company has participated in <b>19</b> on-site strategy meetings with securities dealers.
The Company has participated in <b>5</b> online strategy meetings with securities dealers.	The Company has held <b>7</b> regular report exchange meetings.	





Regular Analysis and Feedback on Investor Concerns, Facilitating Investor Communication Channels Case

Given that investors pay significant attention to the application of tin industry demand, but due to the characteristics of downstream industries being decentralized and not easy to track, the Company has formulated monthly investor relations reports and submitted them to the Board of Directors and management in a timely manner. By sorting out the monthly capital market performance, major events, important shareholder changes, and other data, and summarizing and analyzing the hot issues that investors are concerned about on the "Easy Interaction" platform and other channels, the Board of Directors and management of the Company can understand market changes and investor demands. In the process of communicating with investors, the Company collects and analyzes valuable suggestions, fully listens to opinions, and actively improves relevant work to meet investor demands on the premise of compliance.



Investor Relations Monthly Report

Shareholder Stockholding Analysis Report

Executives Participate in Roadshow Face-to-Face to Convey the Company's Investment Value Case

In September 2023, Liu Luke, Party Secretary, Chairman, and General Manager of the Company, led relevant senior executives to Shanghai to conduct offline investor exchange activities. They fully discussed the Company's core competitiveness, production and operation, and intrinsic value, and carefully listened to and collected investor demands. Through this innovative face-to-face roadshow between company executives and investment institutions, the Company has further narrowed the distance with investors, effectively enhanced mutual recognition, and conveyed the Company's development potential and investment value to the capital market.



Shanghai Offline Investor Exchange Meeting

Focus on Shareholder Returns

The Company has always been prioritizing shareholder interests and returns. While focusing on the Company's high-quality development, it adheres to diversified methods of interest distribution such as cash dividends and share repurchases to reward shareholders, fulfilling dividend obligations to the greatest extent.

Since 2017, the Company has cumulatively distributed cash dividends of CNY 615 million (including the payment of CNY 237 million to repurchase 22.9744 million shares). In 2022, to actively reward the Company's shareholders and share the operating results of the Company's development with them, the Company distributed a cash dividend plan of CNY 1.20 (tax inclusive) per 10 shares to all shareholders, totaling CNY 197.4962 million. This was done on the premise of complying with the Company's profit distribution policy and ensuring the normal operation and long-term development of the Company. The entire process of rights and interests distribution was completed within 15 days after the approval of the General Meeting of Shareholders, realizing the cash dividend in a timely manner.

Live Video Performance Presentation Concerning Investor Interests Case

In 2023, the Company held the 2022 annual performance presentation and investor exchange meeting in the form of live video broadcasting. This fully showcased the Company's operating results. The Company's directors and supervisors conducted in-depth interactive communication with investors through on-site links. They answered the relevant questions raised by investors one by one on the Company's strategic development, resource expansion, hedging, tin industry supply and demand research, deep processing resource restructuring, and other aspects. In this year's performance presentation, the innovative "Entering the Listed Company on Cloud" segment was added. The Company's executives led investors into the Company's Tin Branch and Hualian Zinc Indium companies, vividly displaying the competitive advantages and corporate image of the Company's tin industry chain mining and smelting links. This allowed investors to get closer, understand better, see clearly, and have confidence.



2022 Annual Report Performance Presentation and Investor Exchange Meeting

## Investor Relations Capacity Building

The Company places great importance on the construction of the investor relations management team. The investor relations team is a lean and efficient team composed of financial, economic, and legal professionals. Team members possess numerous professional skills certifications such as CPA qualification certificate, legal professional qualification certificate, intermediate economist qualification certificate, and fund qualification certificate. They have strong professional capabilities and rich work experience, providing robust support for further improving the quality of investor relations.

Since 2023, the Company has actively participated in multiple training related to investor relations management work organized by industry regulatory departments, self-regulatory organizations of listed companies, and internal organizations of the Company. This includes but is not limited to the preparation of regular reports, listed company performance presentations, etc., further enhancing the experience and ability of the investor relations team to carry out related work. Simultaneously, the Company strengthens the training of directors, supervisors, senior management personnel, and related staff on securities market regulations and professional knowledge of investor relations management, laying the foundation for doing a good job in investor relations management work.

## Compliance and Risk Management

During the reporting period, the Company continually improved its risk management system and mechanisms. By considering factors such as the Company's size, industry characteristics, risk preferences, and risk tolerance, the Company systematically identified its primary operational and management risks. It standardized business processes, strengthened risk control, improved job standards, and established a comprehensive risk management system that covers organizational structure, system processes, and method tools.

## System Construction

In 2023, the Company conducted an internal management system status survey and focused on the top-level design of the management system. It established "three pillars" of management system: internal control, risk management, and compliance. The Company formed a series of outcomes such as the "Company Control Rights and Responsibilities List", "Internal Control Compliance Management Manual", "Department Compliance Responsibilities List", etc. It established the "Compliance Management Method", continuously improving the construction of the compliance management system. This effectively ensured the achievements of deepening reform and high-quality development, further improved the Company's operational management level and risk prevention ability, and provided a strong guarantee for promoting the realization of the Company's strategic development goals.

## Organizational Structure

The Company has established a risk management and control system for the Board of Directors and its special committees, the Board of Supervisors, the management layer, and its affiliated branches (subsidiaries). It has also established "three lines of defense" for compliance management. The departments responsible for the lines of defense at all levels perform their respective duties and jointly build the "three lines of defense".



## Implementation of Measures

Through the signing of a compliance commitment letter by all employees, the Company publicizes the compliance management concepts and compliance development needs of adhering to laws and regulations, fair competition, honesty and trustworthiness, integrity, and is committed to promoting the compliance culture of enterprise rule of law. This enhances the core competitiveness of the Company and creates significant value for the Company.

To continuously strengthen the execution of internal control, the Company takes the "three pillars" construction as its focus. During the period of system construction, the Company organized and carried out business risk investigation, formulated targeted rectification measures for the problems found in the inspection. In daily work, it implemented the risk control compliance department's pre-compliance review and risk warning for various major decision-making matters of the Company, achieving full coverage of internal control evaluation. The Company continuously strengthens supervision in key areas and important links, carries out various special audits with risk as the guide, and helps improve the Company's risk and compliance control capabilities.

In addition, the Company continuously carries out training on internal control, risk, compliance, and other aspects of the standardized operation of listed companies, enhancing the Company's compliance governance awareness. In December 2023, it carried out "three pillars" achievement publicity training, helping all staff to deepen their understanding of internal control, risk, and compliance.

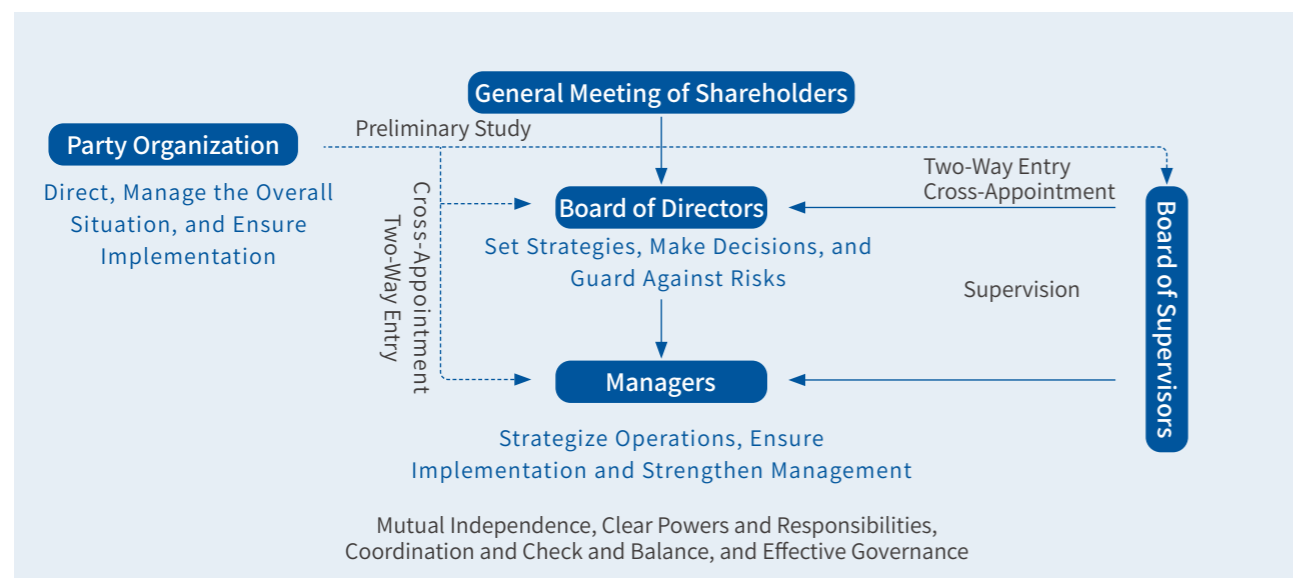
# Party Building Leadership

The Company has always placed the Party's political construction in the first place. Under the correct leadership of the Party Committee of Yunnan Tin Group (Holding) Co, Ltd., the Company has thoroughly studied and implemented the spirit of the 20th National Congress of the Party and the spirit of the Central Economic Work Conference, adhered to the general tone of steady progress, and firmly grasped the study and implementation of General Secretary Xi Jinping's important speeches and important instructions.

## Decision-making System of "Four Mechanisms and One Echelon"

The Company has established a decision-making system known as the "Four Mechanisms and One Echelon". This is in accordance with the relevant requirements of the Company Law, the Constitution of the Communist Party of China, and the Notice from the Organizational Department of the Central Committee of the Communist Party of China and the State-owned Assets Supervision and Administration Commission on the Solid Promotion of Party Building Work into the Articles of Association. The Company has incorporated the related chapter titled "Party Committee and Discipline Inspection Group" in its Articles of Association, thereby enhancing the decision-making system which includes the General Meeting of Shareholders, Board of Directors, Board of Supervisors, Party Committee, and the management.

### Decision-making System of "Four Mechanisms and One Echelon"



## Emphasizing the Importance of Learning to Strengthen Political Loyalty



### The Company has implemented the first topic system as a regular practice

- The Company has organized 43 sessions studying 55 topics under this system, always addressing the overall situation, problems, and work from a political perspective.

### The Company has deeply studied and implemented the spirit of the 20th CPC National Congress.

- It has organized five special study sessions for Party Committees and theoretical center groups of Party Committees. Party organizations at all levels have conducted "Three Sessions and One Lesson" and thematic party day learning over 4,110 times. Leading cadres have delivered 192 special party lessons, trained over 2,440 Party members, and given 177 lectures.

### Promoting Thematic Education in a Solid Way

- The Company has conducted six thematic education seminars, two thematic reading classes, and one exchange of research results for the theoretical learning center group of the Party Committee. Members of the leading group have delivered 10 lectures and 8 thematic lectures at the grassroots level.
- During the period of thematic education, 80 problems were identified and all have been resolved, forming one positive and one negative typical case.
- The Company has formulated practical plans for people's livelihood and completed all 13 items on the list of private affairs. All 8 problems identified have been rectified.



## Integrating into Production and Operation to Enhance Quality and Efficiency

### Implementing the Project Work Method

- Secretary-leading project on "Building the Headquarters Staff Development Channel and Broadband Salary System"
- Key projects to "Promote the Quality and Efficiency of Mine Management Services"
- Innovation project on "Smelting Comprehensive Energy Consumption Technology Application and Promotion"

### Fully committed to deepening reforms

- Fully committed to establish the Company as a world-class, professional, leading demonstration enterprise
- Promoting the construction of a "Management + Specialty" dual-channel career development system and a broadband salary system at its headquarters
- Completing the reform of the simulation division system of the Market Operation Center
- Taking the reform in the mining field as a breakthrough point, the Company completed the cancellation of 114 sections in four mining units within 2023, systematically integrating specialized forces

### Enhancing Its Ability to Resist Risks

- The Company strengthens the management of capital plans, accurately controlling its capital gap and demand.
- The Company has established a legal risk management module in the information platform of the whole life cycle of the contract.
- The Company has been enriching its financing channels and optimizing the proportion of long-term and short-term loans. ....

## Fully consolidating its foundation and highlighting its role

### Further tightening the organizational system

The Company has established eight Party branches directly under the Party Committee of the Company to further standardize the establishment of Party organizations in headquarters departments (centers).

The Company has improved the establishment of Party branch committees directly under the Party branch and has formally elected 36 members, eight secretaries, and eight deputy secretaries.

### Continuing to deepen the brand creation of Party building

The Company closely revolves around the value creation center positioning as the strategic unit of non-ferrous metal raw materials, promoting the newly established directly affiliated branches to carry out party building brand building activities.

### Highlighting demonstration and leading the overall promotion

The Company gives full play to the "two roles" of grassroots Party organizations and Party members, and widely establishes demonstration zones and demonstration sites for Party building.

## Strengthening integrity and discipline, and strictly governing the Party



### Strict Implementation of Responsibility Assignments

- The Company has developed responsibility assignments for grassroots party building, comprehensive party governance, and party conduct and integrity. This ensures that tasks are specific and responsibilities are clear.



### Regular Warning Education

- The Company organizes party members and cadres to study and watch warning education films and notifications of serious legal violations.
- In conjunction with thematic education, the Company has organized 39 leading cadres to conduct on-site teaching in the incorruptible culture corridor of the Yuntianhua Group.



### Addressing Feedback Issues and Rectification

- In response to the three feedback issues from the 2022 annual Party Secretary's leading grassroots party building work review, the Company has implemented ten measures in three areas.
- In October 2023, the 14th round of the holding company's Party Committee provided feedback on the special inspection of case promotion and safety and environmental protection in the sales field. The Company promptly formulated a rectification plan and task breakdown list for rectification.

## Party Class for "Unmotivated" Cadre Special Rectification

Case

In July 2023, Wu Jun, then Secretary and Vice Chairman of the Party Committee of Yunnan Tin, gave a special party class on the special rectification of "unmotivated" cadres. The theme was "practicing the Two Revolutions, enhancing cadre competence in fulfilling duties, striving to be responsible cadres who dare to take positive action". He emphasized the importance of deeply understanding the special rectification of "unmotivated" cadres and educating and guiding all department party members and cadres to continuously improve their ability to perform their duties and strive to be good cadres who dare to take positive action.



Wu Jun teaching a special party class on the special rectification of "unmotivated" cadres.

## Special Study of the Party Committee of Yunnan Tin on Strictly Governing the Party

Case

In July 2023, the 134th meeting of the Party Committee of Yunnan Tin was held as a special session to study the work of strictly governing the Party in all aspects. The meeting analyzed the situation of strictly governing the Party in the first half of 2023 and made arrangements for the work of strictly governing the Party in the second half of 2023. In addition, the meeting emphasized the need for a deep understanding of the spirit of General Secretary Xi Jinping's important speech at the Second Plenary Session of the 20th Central Commission for Discipline Inspection. It called for a clear understanding of the current situation of strict Party governance, a long-term commitment to maintaining strict standards, and unwavering efforts to improve the system of strictly governing the Party in all aspects. This approach is implemented in all areas, aspects, and links of Party building, with a persistent push for strictly governing the Party in all aspects. This provides a strong guarantee for the Company to become a world-class professional demonstration enterprise.



The Party Committee of Yunnan Tin conducting a special study on strictly governing the Party in all aspects

## Cultivate Integrity and Self-Discipline for an Atmosphere of Honesty and Uprightness

The Company places great importance on the integrity education of its employees and managers at all levels. To strictly prevent and control fraud and strengthen the Company's internal governance, the Company has continuously revised and improved the "Anti-Fraud Management System of Yunnan Tin Company Limited". This system clearly designates the comprehensive office of the discipline inspection group as a permanent anti-fraud institution and urges employees and managers at all levels to strictly abide by the relevant rules and regulations of the superior discipline inspection commission. The Company also adheres to the "Provisions on Filing Records of Interference in Enterprises' Normal Operations and Management Activities (Trial)", ensuring that the Company's production, operation, and management activities are standardized, honest, and efficient.

### Anti-Fraud Management System of the Company

#### Reporting and Handling Procedures of Fraud Cases

- Whistleblower Protection System: The Company prohibits any illegal discrimination or retaliation. Those who disclose the whistleblower's information or retaliate against the whistleblower will be punished with a warning or dismissal, depending on the severity of the case. In addition, the investigation and handling results will be reported to the whistleblower.



#### Accountability, Remedies and Penalties

- Accountability: Leaders shall bear responsibility for the occurrence of fraud due to negligence within the scope of their supervisory or in-charge work. The Company's management personnel shall bear the corresponding responsibility for direct operation or participation in decision-making within the scope of their duties.
- Remedial Measures: The internal control of the affected business units shall be evaluated and improved. The Company's business dealings with customers, suppliers, and other relevant units shall be based on integrity and fairness, and the relevant information and requirements of the Company's anti-fraud work shall be communicated to them.
- Punishment: Corresponding punishment shall be given in accordance with the regulations of Party discipline. Those who violate the law shall be handed over to the judicial organs for handling according to law.



To supervise possible corruption within the Company, the Company has set up a special reporting mailbox and telephone. It encourages all employees and stakeholders to frankly report to the Company any behavior that may violate business ethics and anti-corruption principles, including any form of bribery or corruption suspicion. Through continuous tracking and monitoring of the problems found in the report and internal inspection, and taking corresponding measures, the Company aims to further improve corporate governance.

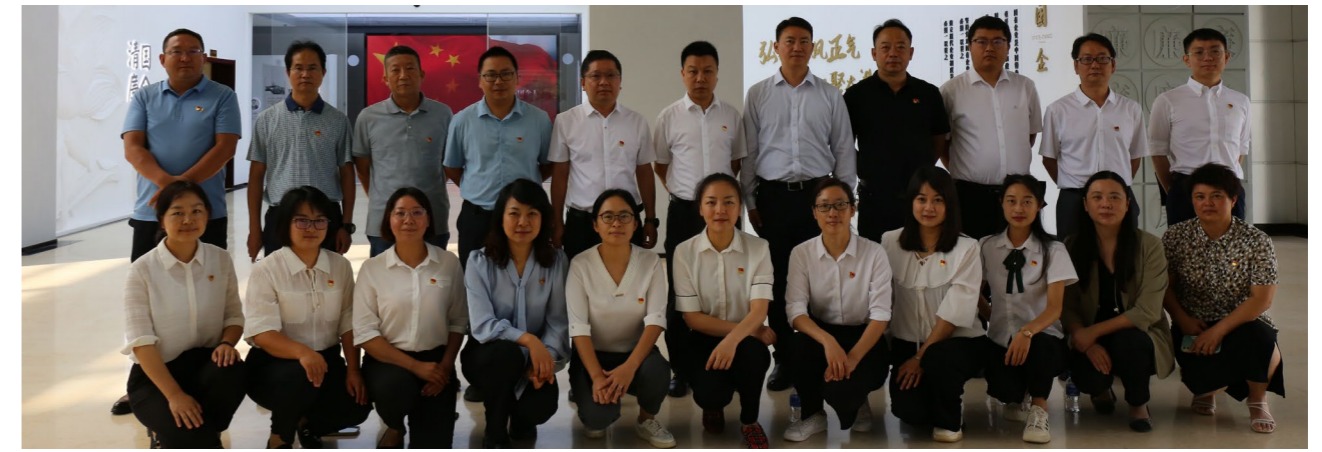


**Whistleblower Hotline:**  
**0871-64983008**

### Regular Warning Education, Case-Driven Reform, and Case-Based Conduct Correction

Case

The Company has organized Party members and cadres to learn from and watch warning educational films such as "Zero Tolerance", "Pain of Tin Mountain", and "Abyss". This education has encouraged Party members and cadres to fasten the "safety belt" of honest practice, and firmly resolve not to become a negative example in warning education. In conjunction with thematic education, the Company has organized leading cadres to visit the corridor of honest culture of state-owned enterprises in Yunnan Province for on-site teaching and integrity warning education. The four subordinate mining units carried out the warning education of protecting factories and mines from top to bottom, and more than 1,800 cadres and workers have been baptized by the education, taking the case as a warning, promoting reform, and rectifying conduct with the case.



Leading officials visited the corridor of incorruptible culture of state-owned enterprises in Yunnan Province for on-site teaching.

### Each Party Branch Carries out Party Day Activities with the Theme of Warning Education

Case

To solidly promote the construction of Party conduct and anti-corruption work in depth, the Party Committee of the Company attaches great importance to and organizes all Party branches to continuously carry out special Party lessons on Party conduct and clean governance. Through negative typical cases, it carries out warning education for Party members, cadres, and workers, further promotes the "Incorruptible Yunnan" action, strengthens the sense of honesty and self-discipline of Party members and cadres, and creates a good atmosphere of integrity.



Party members and cadres of the Company visited and studied at the Honghe Anti-corruption Education Base.



Party Members and Mass Department, Audit Department, Human Resources Department and Securities Department Party Branches of the Company jointly launched Party Day activities on the theme of National Security Education and Learning.

# 2

## Guarding the Earth and Drawing a Picture of Green Prosperity

The Company has always adhered to respecting, complying with, and protecting nature. It firmly upholds the concept that "lucid waters and lush mountains are invaluable assets". With the mission of achieving excellent operations to promote the green and low-carbon development of the industry, the Company actively carries out ecological environment protection work. It strives to implement measures to protect and improve the ecological environment, enthusiastically participates in the national "carbon peaking and carbon neutrality" strategy, establishes a comprehensive carbon reduction management mechanism, and contributes to the green development of the economy and society.

### Responsive SDGs



# Biodiversity

Since the 1990s, the issue of biodiversity has gradually become a focus of attention in the international community. To protect the ecological environment upon which humans depend, the Chinese government actively advocates "building a community with a shared future for mankind" and promotes biodiversity conservation.

The Company is always committed to protecting the green ecology. To protect the biodiversity of the Company's location, it has adopted a series of policies and actions, forming a "risk investigation - ecological management - restoration compensation" management method. Through rational planning of mineral development activities and the implementation of ecological restoration measures, the Company minimizes the adverse impact on local and surrounding regional ecosystems, and promotes the progress of biological diversity.

## Early Stage Hazard Investigation

Mining activities can cause a certain degree of surface damage and biodiversity loss. To minimize the impact, the Company focuses on organizing risk investigations within the scope of the Company's project before pre-project planning and surface disturbance activities. It fully carries out geological exploration, assesses and identifies high biodiversity areas and species impact risks, strives to control the impact scope to mitigate the impact on biodiversity, continuously improves the ecological quality, and realizes the coordinated development of ecological restoration and sustainable production.

### Key Project Design, Development, and Utilization Scheme

Case

In 2023, the Company's leaders formed a professional team of more than 100 special working groups to ensure the stable operation of key projects. The team focused on the preparation of development and utilization plans, two-in-one reports, and environmental impact assessment reports for mining projects around the Company's mining rights. They conducted a detailed assessment of the project's ecological environment status and potential ecological environment impacts. This included, but was not limited to, assessing the impact on land use, surface water, groundwater, soil erosion, geological disasters, ambient air, environmental noise, solid waste, regional ecological sensitivity, agricultural and forestry ecology, etc., to ensure the integrity and stability of flora, fauna, microorganisms, and the ecological environment within the project area. By identifying the current status of the ecological environment and biodiversity, assessing the potential impact on the integrity of the ecological system's biodiversity, identifying potential environmental risk sources in advance, and formulating mitigation measures and emergency plans, the Company ensures the rationality of project construction and site selection.

## Medium-Term Ecological Management

The Company adheres to the Kunming-Montreal Global Biodiversity Framework, focusing on the 23 specific targets set to be achieved within and beyond 2030. This is done in order to protect biodiversity for sustainable use. The Company is committed to complying with the International Finance Corporation (IFC) guidelines for biodiversity conservation and sustainable use of biological natural resources, as well as the United Nations *Convention on*

*Biological Diversity*. The focus is on the protection and sustainable use of biodiversity.

The Company enhances environmental protection education and awareness training for its internal staff. This deepens the understanding and concern for ecological protection at the awareness level. Through training and educational activities, the staff's consciousness of biodiversity protection during projects is strengthened. This forms a company-wide participation in ecological protection at the action level, mobilizing all staff to jointly protect the green ecology and promote the progress of environmental protection.

### Wisely Choosing the Right Location and Planting a Green Future

Case

Based on the local environment and climate conditions of the mine, the Company has selected suitable plant species for planting, such as *Gerbera jamesonii*, chrysanthemum, and other plant species. This increases soil fertility and vitality. Vines are planted on the slopes to achieve vertical greening, thereby protecting and restoring local vegetation coverage. This provides suitable habitats and food sources, supporting the survival and reproduction of local wildlife.

In addition, for 1920 geological disaster sites and the Hualian Zinc-Indium Manjiazhai open-pit mine, a cascade slope control project is implemented according to the characteristics of the slope rock mass. This includes table reinforcement, sloping, filling and leveling, greening, and reforestation to form a cascade slope and prevent slope instability. For the reclaimed waste rock yards #16, #17, and #18, the Company has achieved effective plant management and irrigation for the planted vegetation every day and every shift.



The slope is adapted to local conditions, and the vine rhyme brings a touch of green



Chrysanthemums are planted in the tailings dam of the beneficiation workshop of Datun Tin Mine

## Post-Reclamation Compensation

To excel in ecological protection, the Company strictly formulates and implements the plan for mine geological restoration and land reclamation. It promptly restores land and flora and fauna, focusing on the sustainable development of the mine ecosystem. The Company explores the benign green mine development model of "development, protection, and greening" through mine reclamation, afforestation, and ecological restoration. It continuously improves the vegetation coverage and greening rate of the mine area, enhances the carbon sequestration capacity of the mine ecosystem, and practices the ecological environment protection concept of "lucid waters and lush mountains are invaluable assets".



**Work Objective**

In 2024, in conjunction with the Mine Geological Environment Protection and Land Reclamation Plan of each mining unit and the actual production and operation, it is planned to complete the ecological reclamation task of **90.1** hectares of mines.

**Reclamation of Mining Area for Rejuvenation**

**Case**

After the reclamation of the Yili sub-project of the Laochang Branch, the Company has achieved the greening of wasteland, increased corn production, and increased farmers' income by guiding local farmers to plant green. In addition, the Company has carried out biodiversity monitoring of wild animals and vegetation around the Laochang Branch, such as Yangyoushan, ventilation shaft, and the second work area of the Kafang new mine. Through the joint efforts of the Company and local farmers and villagers, it is now lush green, with birds singing and flowers fragrant, and pheasants multiplying. The Company's ecological management has brought significant changes to the mine.

**2023 Key Performance**

During the reporting period, Datun Tin Mine, a subsidiary of the Company, newly planted about **13,419** trees, shrubs, and vines; sowed grass seeds and small chrysanthemum seeds of about **30** kg; and protected a green area of about **521,868** square meters. More than **100** seedlings were replanted, and the survival rate of vegetation was over **95** %.



The relevant departments of The Company headquarters and Kafang Branch carrying out tree planting activities in Tianwan Area



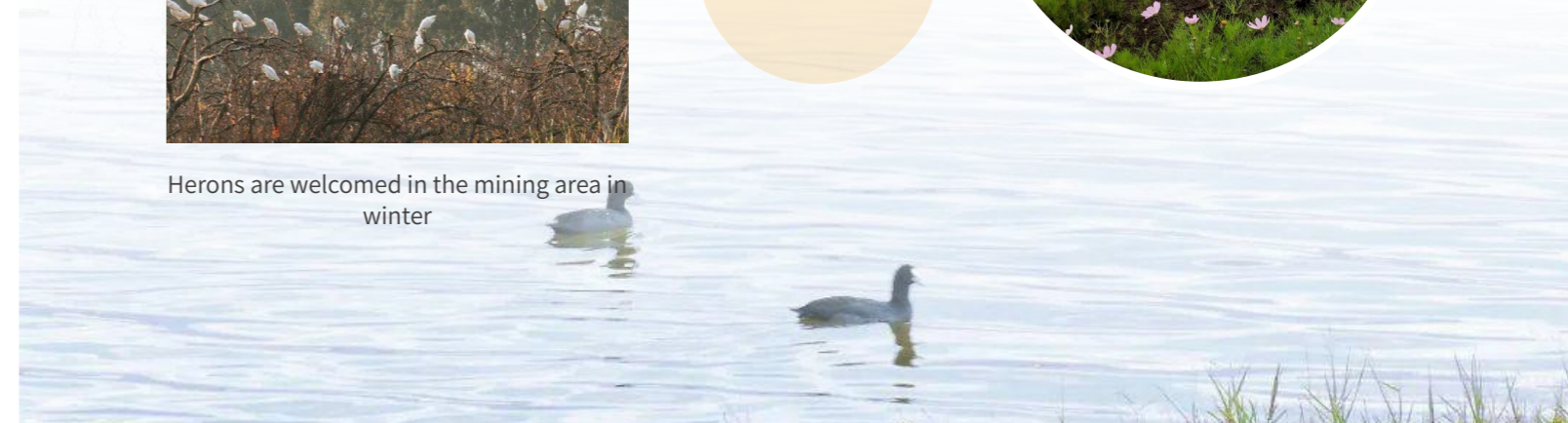
Through reclamation, the wild mushroom has gone from zero to abundant



Herons are welcomed in the mining area in winter



Tailings pond in full bloom of flowers



Water birds swim freely in the tailings pond

**2023 Key Performance**

Since 2020, the Company has restored an ecological area totaling **616** hectares.

Sowed about **4,500** kg of grass seeds, small chrysanthemum seeds, etc.

During the reporting period, the Company's mining units planted approximately **1.219** million new trees, shrubs, and vines

Protected a green area of about **5.483** million square meters

# Tailings Pond Management

At all stages of the life cycle of the tailings facility, the Company actively assumes responsibility to ensure that the safety management of the tailings pond is a priority. The Company has formulated and improved the management system of the tailings pond, continuously conducted environmental monitoring of the tailings pond, and established a dedicated department responsible for strengthening the supervision and management during the operation of the tailings pond to ensure that the discharge of tailings meets the discharge standards. The tailings pond management measures implemented by the Company include, but are not limited to, filling of tailings, establishment of emergency pools, implementation of supervision and monitoring plans, and secondary utilization of tailings pond resources. These measures ensure the efficient, safe, and sustainable development of tailings pond management.

## Risk Management of Tailings Pond

In the process of operating and managing the tailings pond, the Company practices a dual prevention mechanism to effectively prevent and control the risk of the tailings pond. The Company strictly implements the requirements of the Guidelines for the Investigation and Treatment of Potential Pollution Hazards in Tailings Pond (Trial), conducts a comprehensive investigation and treatment work at least once a year before the flood season, formulates a treatment plan according to the list of problems and in combination with the daily investigation and treatment situation, and implements the "one policy for one pond" treatment.

Simultaneously, the Company continuously improves the environmental management account system of the tailings pond and the management process of filling in the account, implements the environmental management account of "one file for one pond", and establishes the "double-prevention mechanism" of the tailings pond. This involves carrying out risk classification management and control of the tailings pond and the investigation and management of hidden dangers, timely discovering and eliminating all kinds of potential safety hazards, ensuring the traces of work, and ensuring the safe operation of the tailings pond.



Online safety monitoring system for the tailings pond

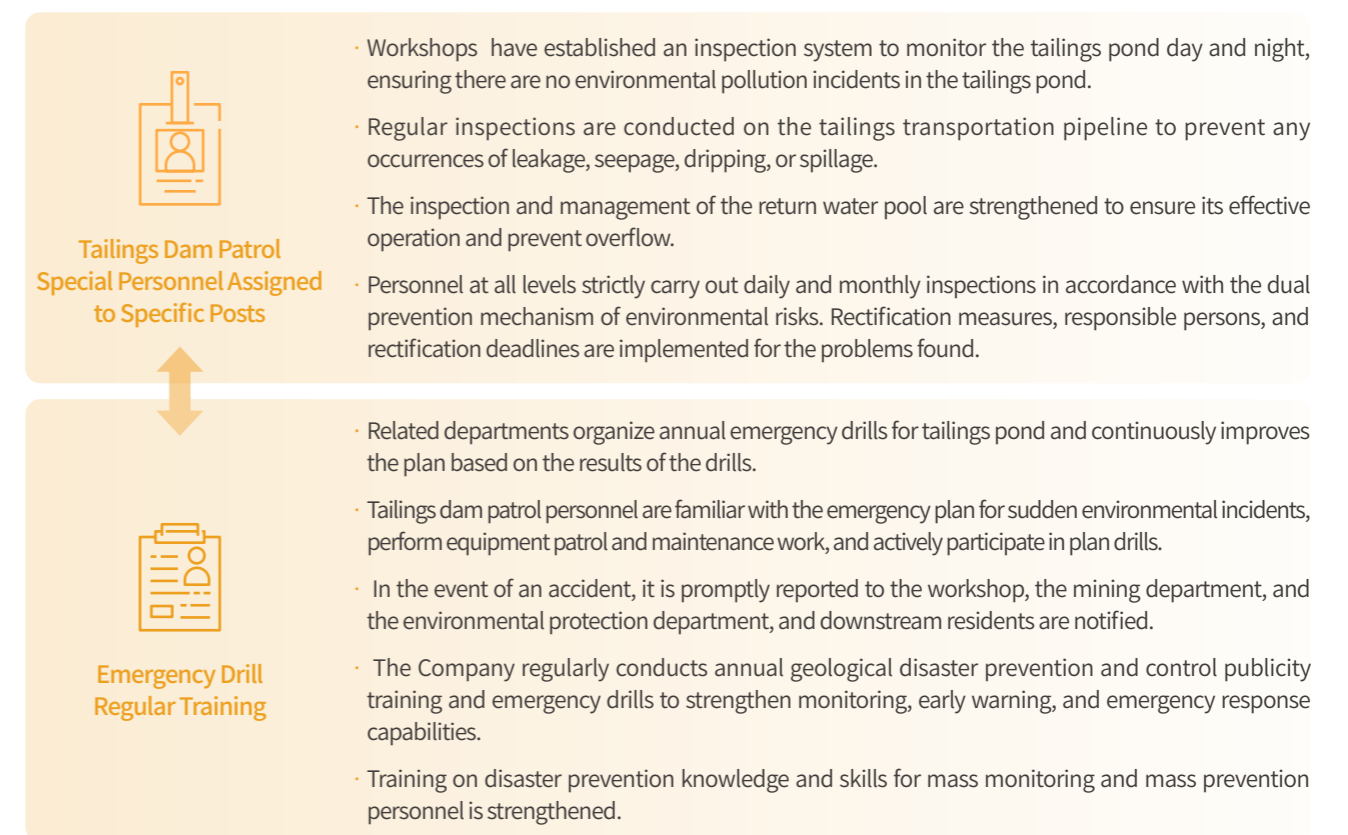
## Closed-loop management of the "dual prevention mechanism" of the tailings pond



## Emergency Management of Tailings Pond

To strengthen the accident emergency plan and response capabilities, the Company has developed and refined a comprehensive emergency plan for the tailings pond. The Company has also enhanced the construction of the online monitoring and early warning system for the tailings pond to timely detect and respond to potential safety hazards.

### Two management measures for emergency management



**Diversified Emergency Reacting System Construction Across Units to Strengthen Tailings Disaster Emergency Response Capability** Case

Through the development of emergency drill plans for sudden environmental incidents, the branches and subsidiaries of the Company regularly organizes and conducts emergency drills for such incidents, and carries out emergency response plan training, effectively preventing and controlling the occurrence of sudden environmental incidents.

In 2023, the Gejiu Municipal People's Government, Yunnan Tin, and the Kafang Branch organized the "2023 Government-Enterprise Joint Drill for Flood Overtopping Accidents in the Kafang Tailings Pond". The Copper Branch, along with the Mengzi Economic Development Zone, Wenshan Zinc Indium, and the Maguan County People's Government, organized government-enterprise joint drills. Each unit organized a total of 46 emergency response plan training sessions for sudden environmental incidents such as waste gas leakage, tailings pond overtopping or dam failure, and hazardous waste leakage and spillage, with a total of 1,103 participants. A total of 70 drills were organized, with 1,687 participants.



Emergency drill of tailings pond

## Comprehensive Utilization of Tailings

To strengthen the comprehensive utilization of tailings resources and reduce the production of tailings, the Company improves the actual recovery rate of ore through scientific and technological means, and uses innovative technology to transform tailings into other resources, thereby improving resource utilization rates. In addition, the Company actively benchmarks against advanced domestic enterprises, conducts investigations and studies, and collaborates with universities such as Kunming University of Science and Technology to carry out technical research on topics such as comprehensive recovery of tailings and comprehensive utilization of tailings pond resources.

**Actively Responding to National Ecological Environmental Protection Policies and Improving the Utilization Rate of Tailings Resources** Case

The construction project of the synchronous tailings paste filling system at Datun Tin Mine involves using tailings to fill underground mining voids after the tailings produced by the Datun Tin Mine Concentrator have been cemented, in accordance with industrial policies and relevant national environmental protection policies. The filled tailings replace traditional building materials, reducing production costs while also reducing the pollution and damage caused by tailings to environmental resources such as soil, water sources, and air. This further realizes the efficient utilization of resources and protects the stability and sustainable development of the ecological environment.



Tailings paste filling pipeline



Tailings transport by long-distance pipeline

# Climate Response Actions

The Company actively responds to the national strategies of "carbon peaking" and "carbon neutrality", and vigorously carries out related work arrangements and deployments to reduce carbon emissions. From the perspective of the entire industrial chain's lifecycle, the Company proactively conducts baseline studies of greenhouse gas emissions, integrates into the national energy "dual control" and carbon emissions "dual control" strategies, and continuously advances the layout of green, low-carbon industries. Through digital means, the Company strengthens the management of electricity consumption in production, plans the construction of an energy information management and control platform, and gradually reduces the unit consumption of comprehensive electricity in mining and smelting. This results in a year-by-year reduction in the Company's greenhouse gas emissions per CNY 10,000 of output value, contributing to the early realization of the "dual carbon" goals.

## Energy Saving and Emission Reduction Measures



**Active Exploration of Ecosystem Carbon Sequestration:** Through mine reclamation, afforestation, and ecological restoration, the Company actively explores green mining models that are combined with ecological carbon sink management.

Carbon Sink Project Development

Energy-Saving Technological Transformation

**Waste Heat Power Generation Project:** The Company continues to advance the technological transformation of smelting waste heat power generation. Steam turbines have been installed in the Tin Branch, Copper Branch, and Wenshan Zinc Indium. The transformation work has been fully rolled out, with each unit generating approximately 35 million kWh, 45 million kWh, and 13 million kWh annually.

**Frequency Conversion Energy-Saving Technological Transformation of Major Equipment:** The Company continues to promote frequency conversion speed regulation and energy-saving technological transformation of major energy-consuming equipment such as fans, water pumps, and electric locomotives. Each piece of equipment saves 15% of electricity annually, effectively improving equipment operating efficiency and safety reliability.

**Permanent Magnet Motor Project:** The Company continues to promote the transformation of permanent magnet direct-drive energy-saving technologies such as rod mills, ball mills, flotation machines, and shaft hoists in mineral processing. Each piece of equipment saves 20% of electricity annually, effectively improving equipment operating efficiency and significantly reducing spare parts consumption.

2023  
Key Performance

In 2023, the Company's total greenhouse gas emissions were **754,898** tons under Scope I.

Total greenhouse gas emissions were **837,352** tons under Scope II.

Through emission reduction measures, the Company directly reduced greenhouse gas emissions by **15,041** tons.

The Company utilized **1.448** billion KWH of clean energy sources such as water, wind, and solar, accounting for **80** % of its total energy use.

**Power Infrastructure Upgrading and Transformation:** The Company continues to promote the optimization of power supply lines and the capacity expansion and transformation of 35kV and 10kV substations to effectively improve power supply reliability and reduce power supply line losses.

**Power Line Power Factor Management:** To ensure the power factor of the lines is above 0.9, the Company has strengthened the maintenance and operation management of centralized compensation and low-voltage local decentralized compensation devices, reducing electricity expenses by about 3.3 million yuan each year.

Technical Transformation of Power Infrastructure

Improvement of Energy Structure

**Optimization of Energy Consumption Structure:** The Company actively increases the proportion of non-fossil energy consumption. In 2023, Tin Branch actively promoted the natural gas substitution for coal project, which has now completed project construction and is in the debugging optimization stage. It is expected to be put into normal use in 2024.

**Mining Belt Transport Power Generation Project:** Hualian Zinc Indium utilizes the potential energy generated by the 1#, 2#, and 3# belts during transportation and converts it into electrical energy, with an annual power generation of 7.4 million kWh.

**Use of Clean Energy:** The Company increases the proportion of clean energy use such as solar energy and wind energy, purchases green electricity, and increases the use of new energy vehicles to replace fuel vehicles.

# Mineral Resources Protection

Strategic key minerals refer to a category of mineral resources that are vitally important to national economic development and indispensable to strategic emerging industries. They are of utmost importance in ensuring resource security. Tin, being one of the 24 minerals listed in the national strategic mineral directory, is a resource that the Company has the responsibility and obligation to steadfastly protect in terms of its stability and security.

To this end, the Company actively promotes both the "increase in source" and "reduction in consumption" of mineral resources. It implements a new round of prospecting breakthrough strategic actions with an "internal exploration and external expansion" approach, strengthens the protective development and utilization of resources, actively carries out geological prospecting, expands the scale of resources, optimizes mining and selection indicators, and improves resource utilization efficiency. This all contributes to safeguarding the national strategic mineral resources.

## "Open Source"

- By formulating relevant regulations such as the "Mineral Resources Reserve Management Measures of Yunnan Tin Industry Co., Ltd." and the "Geological Prospecting (Exploration) Management Measures of Yunnan Tin Industry Co., Ltd.", the Company's management covers the entire process from geological exploration, resource expansion, upgrading and densification, utilization and consumption to the end of mining.
- The Company has achieved new tin and copper resources to reach the scale of medium-sized mines, laying a resource foundation for its sustainable, high-quality, and green development.

## "Resource Conservation"

- Improving the utilization rate of minerals: With the daily adjustment meeting as the starting point and the special meeting as the entry point, the Company gradually reconstructs the mine production scheduling management system, timely corrects and solves the problems of mining loss rate, ore dilution rate, and beneficiation recovery rate that occur during the production process, and continuously improves the quality of production operations.

### Verification of Mineral Resource Reserves to Advance the Protection of Mineral Resources

Case

In 2023, to ensure the stable operation of key projects, the Company's leadership formed several specialized working groups. These groups, composed of more than 100 professionals, carried out the preparation of resource reserve verification reports for the mining rights of subordinate companies and their managed units. Currently, the initial drafts of resource reserve verification reports for several units have been completed and are actively being prepared for review.

### Warning Education Conference on Protecting Factories and Mines, Strengthening the Safety Barrier of Mine Resources

Case

In November 2023, the Company convened a warning education conference on protecting factories and mines, which was attended by over 240 people. The Company put forth four requirements for the work of protecting factories and mines, namely, "unifying thoughts, solidifying responsibilities, forging loyalty, and enhancing collaboration". In addition, the Company produced and collectively viewed the warning educational film "Ants Causing the Dam Break" for factory and mine protection. Through a series of publicity and educational measures, the Company strengthened source control, accurately remedied deficiencies, and promoted the in-depth implementation of comprehensive governance for factory and mine protection. The Company adopted multiple measures such as crackdown, blockade, and prohibition to jointly construct a resource security barrier and ensure the stable supply of resources.



Convening a warning education conference on protecting factories and mines

# 3

## Leading with Environmental Responsibility and Green Mission

The Company thoroughly implements Xi Jinping's socialist thought with Chinese characteristics and ecological civilization thought in the new era, adheres to the "two supremacies" and "two mountains theory", and firmly establishes the concept of green development. The Company continuously improves the construction of the environmental management system, establishes a dedicated management organization to lead, incorporates ecological environment protection work into the development plan, fully considers the impact of production and operation on the ecological environment, rationally utilizes energy and conserves resources, bravely shoulders environmental responsibilities and missions, and ensures green and sustainable development.

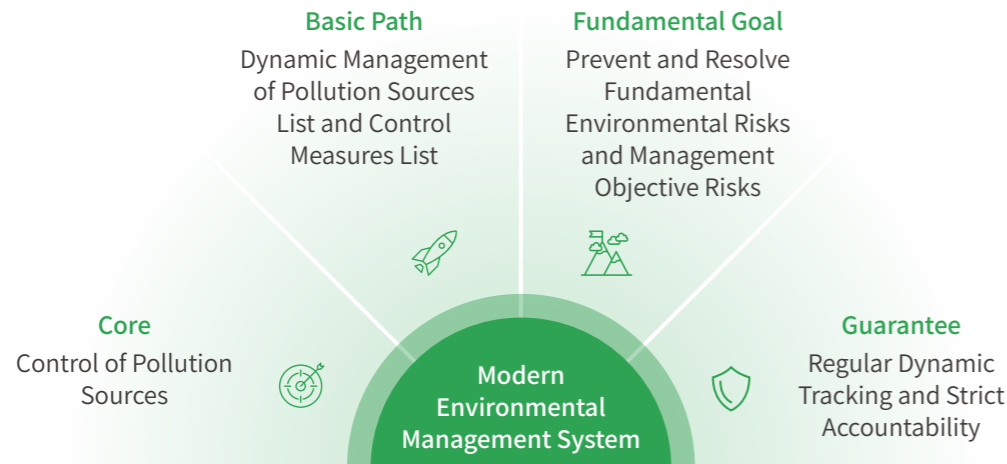
### Responsive SDGs



# Environmental Management

The Company adheres to the environmental protection policy of "Pursuing Excellence, Integrity and Compliance, People-Oriented, Energy-Saving and Low-Carbon, Green Development". Through the in-depth promotion of environmental protection culture and continuous improvement of the environmental management system, the Company supports sustainable development.

## Modern environmental management system of Yunnan Tin



## Environmental Management System

The Company and its subsidiaries conscientiously implement the requirements of relevant laws and regulations on ecological environment protection. The Company has formulated seven management systems, including the "Measures for the Management of Ecological Environment Protection", "List of Responsibilities for Ecological Environment Protection", and "Measures for the Inspection and Supervision of Ecological Environment Protection", which cover water, air, noise, and waste. The Company has also established five major environmental management objectives: "pollutant discharge concentration meets internal control standard requirements, total pollutant discharge complies with emission permit requirements, solid waste is disposed of in compliance with regulations, no occurrence of sudden environmental incidents, and no administrative penalties imposed by government departments". During the reporting period, neither the Company nor its branches (subsidiaries) have been subject to administrative penalties for environmental protection.



ISO14001 Environmental Management System Certification

## Signing the "2023 Production Safety and Ecological Environment Protection Responsibility Agreement", Deepening the Implementation of Organizational Environmental Protection Responsibilities

Case

In 2023, in accordance with the principle of "horizontal to the edge, vertical to the bottom", the Company signed the "2023 Production Safety and Ecological Environment Protection Responsibility Agreement" with its subsidiaries and departments at all levels, incorporating environmental protection target indicators into the assessment of the environmental protection responsibility agreement. With the comprehensive supervision of the Safety and Environmental Protection Department, the specialized management of various business departments, and the management mechanism responsible for each unit, the Company has solidified safety and environmental protection responsibilities at all levels, achieving grid-style management of safety and environmental protection.



The signing site of the Company's Safety and Environmental Protection Responsibility Agreement in 2023

## Environmental Compliance Management

The Company and its subsidiaries strictly implement the requirements of laws and regulations such as the *Environmental Protection Law*, *Environmental Impact Assessment Law*, "Regulations on Environmental Protection Management of Construction Projects", "Interim Measures for Environmental Protection Acceptance of Completed Construction Projects", and "Management Measures for Post-Assessment of Environmental Impact of Construction Projects (Trial)". They strictly adhere to the "Three Simultaneities" principle for environmental protection equipment and facilities during project construction. During the feasibility study stage of project construction, ecological environment protection measures are considered as an important basis. In the process of project design, construction, and operation, the Company promotes environmental management work in accordance with the law.

Joint Advancement of Multiple Projects, Building a Project Compliance Management System Case

The Company insists on managing project work in accordance with the law and strengthens the supervision and guidance throughout the entire process of project construction. In 2023, the Company completed the environmental impact post-assessment and filing for two ore dressing technical renovation projects and one smelting project, and completed four independent environmental protection acceptances upon completion and one phased environmental protection acceptance. Through proactive management of its own projects' compliance, the Company actively promotes the standardization of projects.

In 2023, three projects received EIA approval, including the design and construction of safety facilities changes for the Huafen Tailings Pond at Datun Tin Mine, the construction of the synchronous tailings paste filling system at Datun Tin Mine, and the technical transformation for quality improvement and efficiency enhancement at Hualian Zinc Indium's Xintian Workshop. Seven projects obtained EIA registration forms, including the Jiajieshan Domestic Sewage Renovation Project at Datun Tin Mine, the project to add a shed to the Laochang 1800 Raw Ore Pile Plant, and the Safety and Environmental Protection Renovation of the Kafang 3# Pit Raw Ore Pile Plant.



EIA approval for design change of safety facilities of Huafen Tailings Pond Project (left); EIA approval for technical transformation of quality improvement and efficiency enhancement of Hualian Zinc Indium Xintian Workshop (right)

## Safety and Environmental Protection Training Activities

The Company diligently implements Xi Jinping's Thought on Ecological Civilization, focusing closely on the theme of "building a modern harmonious coexistence between human and nature" and the "Sixth Five-Year Plan" environmental day. The Company and its subsidiaries earnestly implement relevant laws and regulations on ecological environment protection, incorporating ecological environment protection training into the employee training plan. Through various training methods such as theoretical study of the Party Committee's central group, specialized training, external training, and internal training, the Company promotes the study of environmental protection laws and regulations and pollution prevention technology among employees.

2023 Key Performance

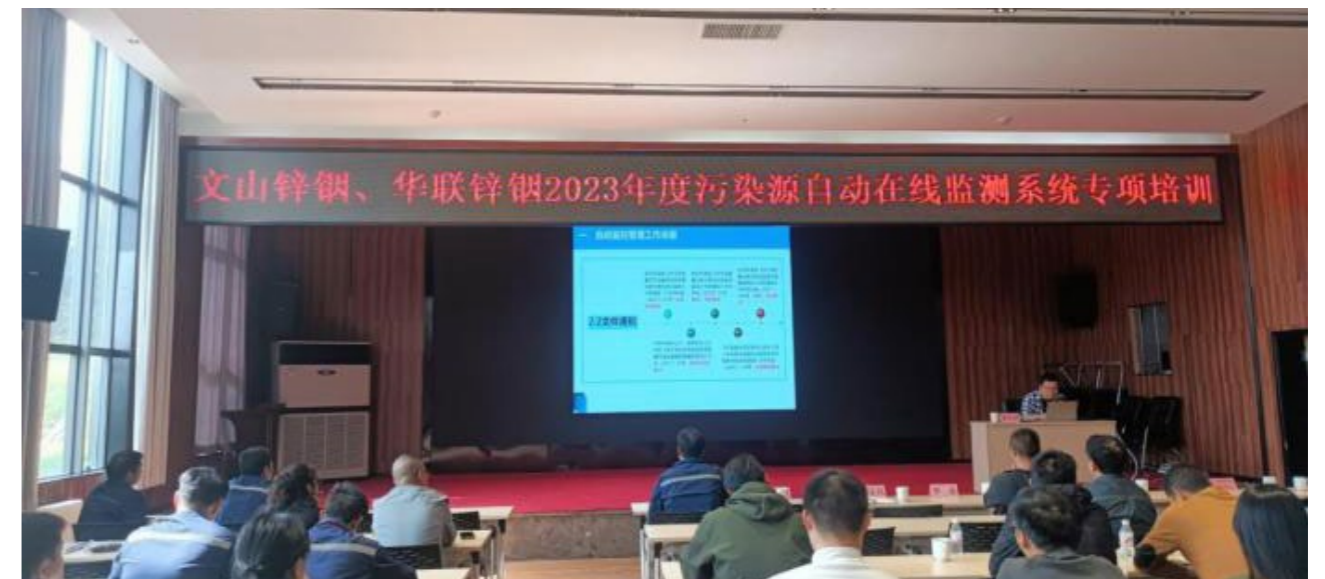
In 2023, the Company and its subsidiaries and workshops carried out ecological environment protection knowledge training **471** times for a total of **32,076** individuals.



Environmental protection training conducted by experts from the Chinese Research Academy of Environmental Sciences and Yunnan Research Academy of Eco-environmental Sciences



Datun Tin Mine conducting typical case study of central environmental protection supervision



Wenshan Zinc Indium and Hualian Zinc Indium conducting specialized training on online monitoring of pollution sources



Compilation of the Ecological Environment Protection Knowledge Manual to Enhance Employees' Environmental Protection Knowledge Reserve Case

In 2023, to further promote employees' understanding of ecological environment protection knowledge, the Company compiled the "Ecological Environment Protection Knowledge Manual". This manual covers eight aspects including laws and regulations of ecological environment protection, atmosphere, water, solid waste, soil environment, noise pollution prevention and control, emergency management of sudden environmental incidents, and a checklist for common ecological environment issues. It is distributed to all departments and subsidiaries for study, helping employees better grasp the knowledge of environmental protection.



"Ecological Environment Protection Knowledge Manual of Yunnan Tin Co., Ltd."

June 5 Environmental Day Activities, Learning to Implement Laws and Regulations on Ecological Environment Protection Case

In 2023, the Company closely focused on the theme of "Building a Modern Harmonious Coexistence between Man and Nature" for the June 5 Environmental Day. In line with the Company's actual situation regarding ecological environment protection and green development, the Company issued the "June 5 Environmental Day Publicity Program 2023". The Company carried out activities for the June 5 Environmental Day through thematic posters, thematic propaganda, hanging slogans, and pushing information on ecological environment protection through WeChat public accounts. This further promoted the popularization and learning of knowledge on ecological environment protection.



Site of promotional activities

Copper Branch (left) and Hualian Zinc Indium (right) viewing the promotional film of June 5 Environment Day

# Resource Management

## Energy Management

The Company strictly implements national mandatory standards such as the "Energy Consumption Limit for Unit Products of Non-ferrous Heavy Metal Smelting" and the "Energy Consumption Limit for Unit Products of Tin Concentrate". It strictly controls the comprehensive energy consumption of mining (stripping), mineral processing, and smelting, and revises the "Quality, Environment, Occupational Health, and Energy Management Manual" to establish an energy management system.

To reduce energy consumption and improve energy efficiency, the Company actively carries out energy-saving transformation actions in areas such as technical transformation of basic power facilities, energy optimization, energy-saving technical transformation, and energy-saving special projects. Through strengthening the innovation of process technology and equipment, the Company achieves energy saving and consumption reduction, seizes the opportunity of clean technology development, and becomes a practitioner and guardian of ecological civilization construction.



ISO 50001 Energy Management System Certificate

In 2023, the Company's energy consumption target:

- The comprehensive energy consumption for mining and mineral processing was set to decrease by **1%** year-on-year, based on the average value of the previous three years.
- The comprehensive energy consumption for smelting was set to decrease by **1%** year-on-year, based on the actual target in 2022.
- The comprehensive energy consumption per unit product of tin smelting enterprises was set to be less than or equal to **1550** kgce/t.

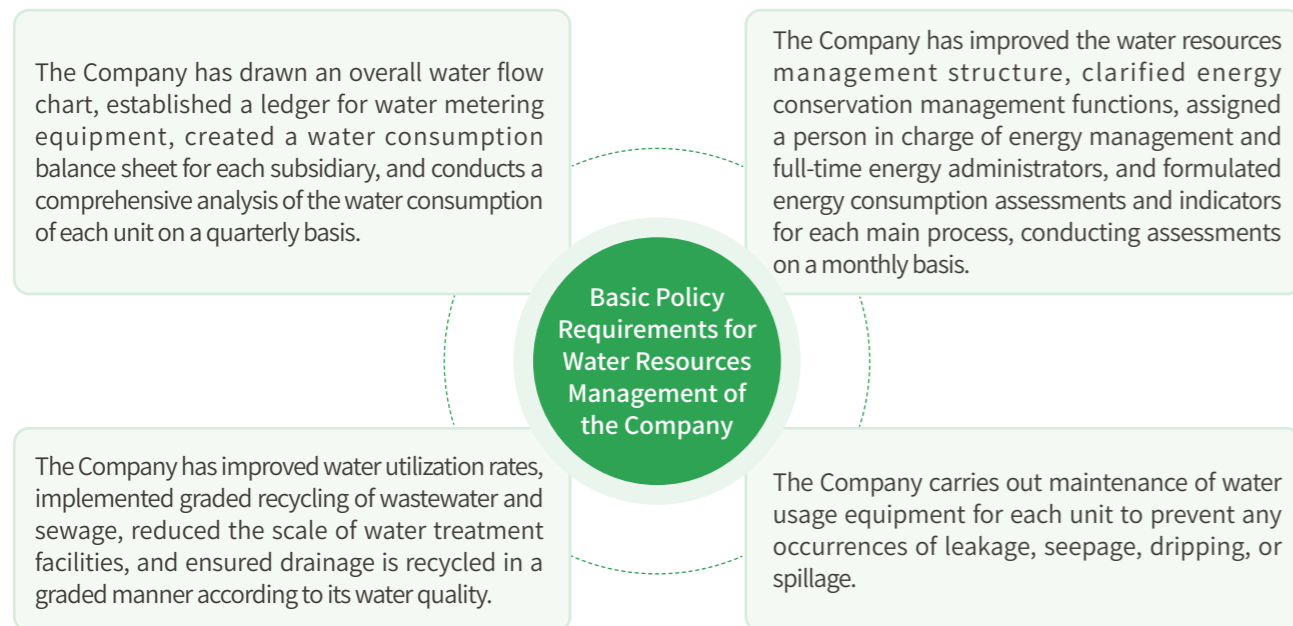
The energy consumption in 2023 was as follows

Energy Consumption Index	Unit	2021	2022	2023
Natural Gas	Cubic Meter	9,276,054	8,379,621	7,806,890
Raw Coal	Tons	125,880	127,926	132,544
Diesel	Tons	25,972	23,880	24,981
Gasoline	Tons	198	192	176
Renewable Energy	Kilowatt Hour	1,599,870,300	1,618,126,067	1,750,007,924
Outsourced Electricity	Kilowatt Hour	1,919,218,392	1,973,324,472	2,011,503,361

## Water Resources Management

The Company has established water resource management systems and policies such as the "Water Supply and Drainage Management Measures", with a focus on water conservation, protection of water sources, and reduction of water intake risks. In addition, the Company actively promotes the development of national water-saving enterprises, adheres to the "Evaluating Guide for Water Saving Enterprises (GBT7119-2018)", conducts inspections in line with these requirements in daily water resource management, actively promotes water-saving awareness, optimizes the use of water resources in the production process, and saves new water consumption at the source by improving process flows and optimizing equipment.

### The Company's basic policy requirements for water resources management



### Risk Management of Water Resources

In strict compliance with legal and regulatory requirements, the Company and its subsidiaries have diligently implemented measures for the prevention and control of water pollution. Regular inspections are conducted to identify potential risks of water pollution. In line with newly issued standards, norms, and policy requirements, the Company has identified and addressed deficiencies in its water environment, enhancing relevant facilities where necessary.

#### The data on water resource usage for the year 2023:

Indicators of Water Resources	Unit	2021	2022	2023
Groundwater	Cubic Meter	4,305,553.00	4,018,195.00	1,571,053.00
Third-party Water Supply	Cubic Meter	387,759.48	268,229.00	7,104,020.00
Water Use Intensity	Cubic Meter/CNY 10,000	1.29	1.02	1.83
Circulating Water Consumption	Cubic Meter	108,690,331.00	124,734,207.10	218,560,009.00

## Emission Management

In an effort to reduce the emission of the "three wastes", the Company has established the "Ecological Environment Inspection and Supervision Management Measures" and a specialized management system. Each branch (subsidiary) of The Company has proposed internal control standard limits for the emission of major pollutants, all of which are lower than the national standard values. Measures have been implemented to promote compliance and standard emissions.

### Waste Gas Treatment

The Company strictly adheres to the policies and systems of the "14th Five-Year Plan for Eco-environmental Protection of Yunnan Province" and the "14th Five-Year Plan for the Prevention and Control of Industrial Solid Waste and Heavy Metal Pollution of Yunnan Province". The Company strictly enforces the relevant requirements of pollutant discharge permit management regulations and pollutant discharge standards. The Company identifies the types of pollutants produced in the production and operation links of the Company and its subsidiaries. An annual monitoring plan is formulated for monitoring management, the construction of treatment facilities is optimized and maintained for stable operation, and all waste gases are discharged up to the standard after treatment.

#### Strict Implementation of Policies and Regulations, Active Enhancement of Equipment Technology Upgrades Case

Since 2023, enterprises in the lead, zinc, and copper smelting industries in key regions have implemented the requirements of special emission limits for particulate matter and key heavy metal pollutants. They have earnestly implemented the requirements of environmental documents issued by local governments, organized and planned the implementation of special emission limits for particulate matter and key metal pollutants, and accelerated the promotion of waste gas collection and treatment. The management of exhaust emissions is continuously improved.

- Wenshan Zinc Indium**  
**Upgrading and transformation of the dust collection equipment**  
 Achievement: The particulate matter has met the special emission limit requirements.
- Wenshan Zinc Indium**  
**Technical transformation of amine liquid return pipe for sulfuric acid tail gas dust**  
 Achievement: The average emission concentration of the tail gas from sulfuric acid production has been reduced by over 30% through the technical upgrading and transformation of the sulfuric acid tail gas spray system.
- Kafang Branch**  
**Environmental remediation and upgrading of the 3# Pit Raw Ore Storage Yard**  
 Measure 1: Harden the original raw ore storage yard and add a canopy.  
 Measure 2: Replace the original overflow water film dust collector and multi-tube impingement dust collector with a high-efficiency wet dust removal unit, and complete the construction of the 5000 t/d process supporting dust collector upgrade project.  
 Achievement: Improve the efficiency of dust collection and removal, and effectively control the unorganized emission of waste gas and the risk of air pollution.
- Copper Branch**  
**Formulation and implementation of an ultra-low emission plan**  
 Rigorously implement the optimization and upgrading of dust removal equipment in accordance with the plan, and consistently report the progress of the work to the local ecological environment authorities.

Waste gas treatment measures of each branch (subsidiary)

**Coordinated Implementation of Multiple Measures to Efficiently Reduce Exhaust Emission Pollution** Case

The Company employs dust suppressants, dust-proof nets, and sprinkling measures to mitigate the impact of unorganized exhaust gas on the ambient air. Various units have adopted dust reduction measures such as enclosures, coverings, atomized sprinkling, and ceiling construction in raw and auxiliary material yards and material transportation stages. These measures effectively suppress the generation and emission of dust.

Hualian Zinc and Indium has installed sprinkling facilities and an air quality particulate matter monitoring system along its transportation routes. The Company has implemented interlocking control of particulate matter concentration monitoring and sprinkling facilities. Fog cannon dust suppression facilities have been installed in the Daping beneficiation workshop to reduce the risk of dust pollution in raw ore yards and open pits.



Spray dust suppression device in the Daping beneficiation workshop of Hualian Zinc and Indium

The Laochang Branch has completed environmental treatment work for 1,800 ore stacking platforms. The Company has added ground hardening, enclosures, canopies, and sprinkling dust suppression facilities to further control dust generation.



Dust-proof net laid on the dry beach of the tailings pond of the Laochang Branch

**Key Performance**

Name of the Company or Subsidiary	Names of Main Pollutants and Characteristic Pollutants	Number of Discharge Outlets	Emission Concentration	Implemented Pollutant Discharge Standards	Total Discharge Amount from the Main Discharge Outlet	Approved Total Discharge Amount from the Main Discharge Outlet
Tin Branch	Particulate Matter	21	0.5-27.7mg/m <sup>3</sup>	30mg/m <sup>3</sup>	26.06t	47.02t
	Sulfur Dioxide	2	1.7-283mg/m <sup>3</sup>	400mg/m <sup>3</sup>	16.77t	430t
	Nitrogen Oxides	2	1.34-152mg/m <sup>3</sup>	200mg/m <sup>3</sup>	63.99t	169.1t
Copper Branch	Particulate Matter	13	0-60.5mg/m <sup>3</sup>	80mg/m <sup>3</sup>	14.966t	55.962t
		1	2.85-3.5mg/m <sup>3</sup>	50 mg/m <sup>3</sup>		
	Sulfur Dioxide	3	0.80-52.75mg/m <sup>3</sup>	400 mg/m <sup>3</sup>	53.739t	440.565t
Wenshan Zinc Indium	Particulate Matter	19	1.17-69.8mg/m <sup>3</sup>	80mg/m <sup>3</sup>	6.77t	20.701t
			11.9-15mg/m <sup>3</sup>	120mg/m <sup>3</sup>		
			15.5mg/m <sup>3</sup>	20mg/m <sup>3</sup>		
	Sulfur Dioxide	4	23.93-185mg/m <sup>3</sup>	400mg/m <sup>3</sup>	51.57t	181.95t
			5mg/m <sup>3</sup>	50mg/m <sup>3</sup>		
	Nitrogen Oxides	1	12.05-28.67mg/m <sup>3</sup>	240mg/m <sup>3</sup>	32.38t	90.07t
18mg/m <sup>3</sup>			200mg/m <sup>3</sup>			

**Waste Water Treatment**

The waste water generated by the Company primarily originates from the production processes of mineral processing, smelting, and deep processing units. The main pollutants in the water body are chemical oxygen demand (COD), ammonia nitrogen, and heavy metals. The Company has established a stringent "Waste Water Pollution Prevention and Control Management" system to ensure compliance with relevant national and local laws and regulations. Simultaneously, a systematic monitoring mechanism has been set up to regularly sample and monitor production waste water.

Furthermore, in accordance with the principle of "diversion of clean and polluted water, diversion of rainwater and waste water,

diversion of different types of waste water", the Company and its branches (subsidiaries) have set up rainwater and sewage networks. These networks classify and collect production waste water, initial rainwater, and domestic sewage. They have constructed facilities such as sedimentation tanks, initial rainwater collection tanks, production waste water treatment systems, and domestic sewage treatment systems to implement classified collection and treatment of waste water.

Waste water treatment measures of each branch (subsidiary) of the Company

Unit	Waste Water Treatment Initiatives
Wenshan Zinc Indium	<p><b>Waste water is classified and reused nearby to improve the comprehensive utilization rate of waste water:</b> Wenshan Zinc Indium insists on controlling from the source and systematically sorting out the generation nodes of waste water. It comprehensively sorts out and classifies the generation, treatment, reuse, and discharge of waste water to maximize the utilization of production waste water and improve the comprehensive utilization efficiency of waste water. Through technical improvement, the waste water treatment is reduced by about 450,000 m<sup>3</sup> per year, and the cost of waste water treatment is saved by more than CNY 1.5 million.</p>
Hualian Zinc Indium	<p><b>Clean water and sewage are diverted to reduce the total amount of waste water at the source:</b> Hualian Zinc Indium has completed the construction of the Wawadong Clean Water and Sewage Diversion Project of the Nanjia Tailings Pond. By diverting the clean water outside the Nanjia Tailings Pond, the water outside the reservoir is reduced to enter the tailings pond, and the treatment capacity of tailings waste water is further reduced.</p> <p><b>Impermeable membrane to prevent and control the risk of wastewater pollution:</b> In 2023, Hualian Zinc Indium Daping Beneficiation Workshop continuously improved the pollution control facilities of the raw ore storage yard. Impermeable membranes are laid in the raw material storage yards of the AB system and C system respectively, and surface water collection facilities are constructed in the storage yard. This effectively prevents and controls the risk of soil and groundwater pollution caused by the overflow of leachate from the storage yard.</p>
Datun Tin Mine, Smelting Branch, Laochang Branch	<p><b>Sewage collection project construction increases sewage collection and treatment capacity:</b> The Datun Tin Mine and Smelting Branch respectively collect domestic sewage from the Jiayi Mountain area and the Baishachong area. The Laochang Branch has completed the construction of the sewage collection and treatment project in the Tangziao area of the old factory. The completion and use of these three projects result in an annual inflow of 80,000 tons of sewage into the city's domestic sewage pipe network and a treatment volume of 50,000 tons.</p>



Impermeable membrane is laid in the raw ore storage yard of Hualian Zinc Indium Daping Workshop

Key Performance

Name of Subsidiary and Discharge Outlet	Major Pollutants	Discharge Mode	Emission concentration	Implemented pollutant discharge standards	Total discharge amount from the main discharge outlet	Approved total discharge amount from the main discharge outlet
Yunxiang Mining and Metallurgy's Initial Rainwater Outlet	COD	Centralized Waste Water Discharge	3.96 mg /L	60 mg /L	11.61kg	1500kg
	Ammonia Nitrogen	Centralized Waste Water Discharge	0.269 mg /L	8 mg /L	0.789kg	200kg
Cooling Circulating Waste Water Discharge Outlet of Wenshan Zinc Indium	COD	Centralized Waste Water Discharge	16.97-33.93mg/L	60mg/L	2.45t	3.42t
	Ammonia Nitrogen	Centralized Waste Water Discharge	0.011-0.17mg/L	8mg/L	7.5kg	472kg
Discharge Outlet of Dagou Tailings Pond in Hualian Zinc Indium Copper Street	COD	Centralized Waste Water Discharge	11--29mg/L	60mg/L	5.71t	129t
	Ammonia Nitrogen	Centralized Waste Water Discharge	0.13--3.51mg/L	8mg/L	0.58t	8.6t
Discharge Outlet of Hualian Zinc Indium Nanjia Tailings Pond	COD	Centralized Waste Water Discharge	6--27mg/L	60mg/L	9.42t	59.32t
	Ammonia Nitrogen	Centralized Waste Water Discharge	0.1--0.69mg/L	8mg/L	0.23t	7.91t

Waste Disposal

The Company is committed to promoting sustainable development and environmental protection. It diligently implements the requirements of laws and regulations such as the *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste* and enforces a mandatory classification system for the solid waste it generates. In 2023, the solid waste produced by the Company primarily consisted of waste rocks and tailings from mining and selection units, general industrial solid waste such as water-quenched slag and gypsum slag from smelting units, and hazardous waste such as arsenic-containing slag and leaching slag.

The Company's waste management process



The Company focuses on the full-process management of hazardous waste from generation, collection, transfer, storage, and disposal. It has formulated relevant environmental management assessment methods for projects like Datun Tin Mine, set reduction targets, and requires each waste-producing unit to be primarily responsible for the management of each stage. The Supply and Marketing Workshop is the main unit responsible for the management of hazardous waste throughout the mine. The Safety and Environmental Protection Department carries out comprehensive supervision and improves the staff's ability to manage hazardous waste through training and awareness campaigns.

Conducting Hazardous Waste Technical Specification Training to Enhance Employees' Hazardous Waste Management Skills Case

To advance high-quality, zero-harm hazardous waste management capabilities, the Company's Datun Tin Mine has conducted specialized training on the interpretation of technical specifications for setting up hazardous waste identification marks. Through employee education on changes in hazardous waste signs and labels, and explanations of the "three standards and three codes" of hazardous waste, employees are taught how to intelligently manage and track hazardous waste situations. This has further improved the efficiency of hazardous waste management work and strengthened employees' understanding and ability to manage hazardous waste.



Explanation of hazardous waste knowledge

Strengthening Technical Research and Improvement to Optimize Waste Disposal Work Case

The Company actively optimizes waste treatment technology. The Copper Branch's research project on advanced treatment technology for copper smelting waste acid wastewater has been completed and put into operation, helping the Copper Branch reduce the production volume of arsenic-containing hazardous waste by more than 50%. In addition, the Copper Branch has completed the research on the technology of extracting valuable metals from copper smelting dust and the technical upgrade and transformation of the original copper smelting dust treatment project. This can add about 12,000 tons of hazardous waste for resource utilization every year. Through technical improvements, Wenshan Zinc Indium has realized the conversion of neutralized slag from hazardous waste to general industrial solid waste, reducing the annual production of hazardous waste by more than 20,000 tons.



Research project on advanced treatment of acidic waste water in the Copper Branch

The Company's General Industrial Solid Waste Situation

Year	Output (10,000 tons)	Self-utilization amount (10,000 tons)	Self-disposal amount (10,000 tons)	Outsourcing disposal amount (10,000 tons)	Storage capacity (10,000 tons)
2021	3,124.71	185.28	2,846.03	93.4	0
2022	2,980.19	286.34	2,579.59	112.82	1.44
2023	6,076.31	123.03	5,813.25	139.89	0.14

The Company's Hazardous Waste Situation

Year	Output (10,000 tons)	Self-utilization amount (10,000 tons)	Self-disposal amount (10,000 tons)	Outsourcing disposal amount (10,000 tons)	Storage capacity (10,000 tons)
2021	21.19	7.17	6.19	7.82	0.01
2022	23.27	8.73	5.85	8.62	0.07
2023	21.63	10.18	3.86	7.30	0.29

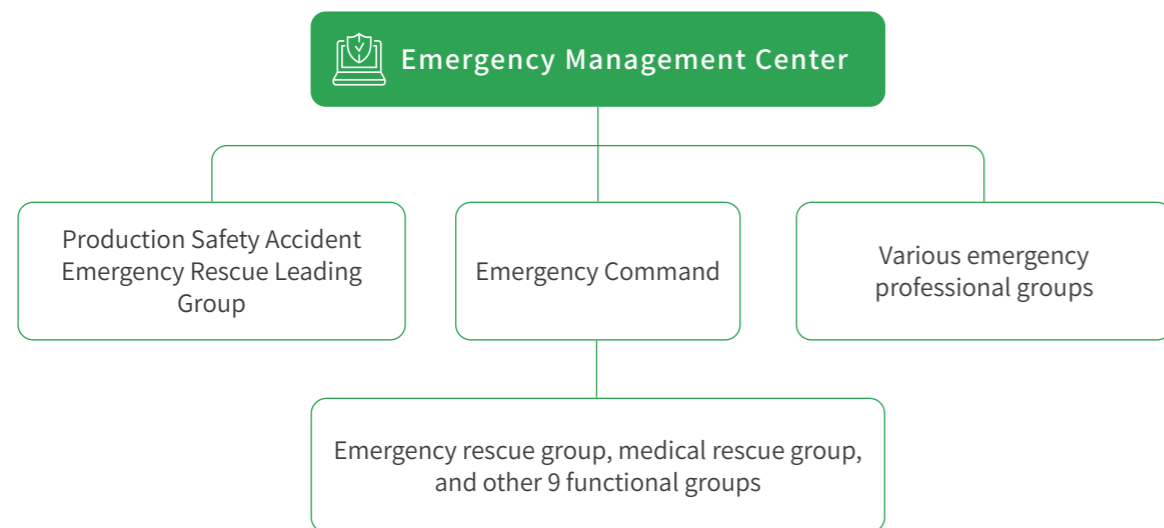
# Environmental Safety

The Company consistently adheres to the concept of environmental safety. It strives to build a robust occupational health and safety management system, establish a risk control and emergency management system, and create a safety culture brand with company characteristics. All these efforts provide a strong guarantee for the Company's high-quality development.

## Emergency Management System

In 2023, to further prevent environmental safety risks, the Company continuously improved its environmental safety management system. It timely updated the "Technical Guidelines for the Construction of Dual Prevention Mechanism for Environmental Management - Investigation and Treatment of Environmental Hidden Dangers", the "List of Risk Grading Control Measures", and the "Management System of Dual Prevention Mechanism for Safety Risk Grading Control and Hidden Danger Investigation and Treatment". The Company formulated the "Criteria for Determining Major Safety Risks (Trial) of Yunnan Tin Co., Ltd.", formed a list of major risks, and established a comprehensive emergency management system. This system helps eliminate hidden dangers of accidents, cut off the chain of accidents, and ensure the steady and sound development of the Company's safe production.

### Emergency management system of the Company



## Organizing Emergency Rescue Training to Strengthen Employees' Practical Abilities Case

During the reporting period, to enhance the effectiveness of emergency rescue, the Company carried out targeted practical drills of emergency plans such as mine roof fall, poisoning and asphyxiation, underground water penetration, and geological disasters. It also conducted emergency rescue drills for confined space operation accidents, waste mineral oil leakage accidents, road traffic accidents, object strike injury accidents, and fire safety accidents. These drills effectively improved the staff's practical experience in emergency rescue and their ability to avoid disasters and emergencies in a timely manner.



Drill for mine roof fall and rib spalling



Drill for underground water penetration



Wenshan Zinc Indium conducting comprehensive emergency drill for sulfur dioxide leakage



Drill for waste mineral oil leakage accident

**2023**  
Key Performance

During the reporting period, the Company organized **89** actual combat emergency drills, with a total of **2,434** people participating in and observing the drills.

The Company carried out **4** inspections and assessments, **77** routine supervisory inspections, and **4** rounds of major accident hidden danger investigation and remediation.

## Safety Innovation Technology

The Company is committed to enhancing the innovative efficiency of deep processing, ensuring safety issues, consolidating the foundation of resources, improving the efficiency of safety protection with digital technology, and accelerating cost reduction, quality improvement, and efficiency enhancement.

### Digital Electronic Detonator Technology to Strengthen Mine Safety Management and Control Case

In November 2022, electronic detonators were put into use in Datun Tin Mine, and 18 electronic detonator authentication base stations were installed. By the end of May 2023, the non-electric second detonator was fully upgraded to a digital electronic detonator. This promoted the transformation of detonating materials towards a safe, reliable, and efficient direction, effectively avoiding the possibility of misoperation detonation. Compared to ordinary detonators, it is safer and more reliable, providing a guarantee for the safety and efficiency of mine production.

#### Three advantages of digital electronic detonator

- Safe and efficient, controllable detonation time**  
 The delay time of the pipe section is set on the operation site, which can be detonated hole by hole or by section, with a maximum blasting delay of 60 minutes.
- Avoiding the risk of misoperation detonation**  
 The digital electronic detonator has strong anti-AC/DC, anti-static, and anti-radiation interference capabilities. It can be detonated only when all the procedures such as downloading the registration code, scanning the code for confirmation, connecting to the line, and networking are completed.
- Reducing the risk of theft and illegal use**  
 The information of the detonator itself and the identity information of the blaster are collected together by scanning the code. The detonation password is designed to be bound by three codes. When detonating the electronic detonator, a special detonation password is required.

### Introduction of More Efficient Boom-Type Roadheader to Promote Green and Safe Development of Mining Case

To promote the mechanization and high-quality development of mining, the Company's Datun Tin Mine introduced a boom-type roadheader and put it into use. Compared to traditional blasting excavation methods, the boom-type roadheader not only enhances the efficiency of excavation but also significantly improves the safety of excavation construction. Firstly, by replacing explosives, it eliminates the risk of blasting injuries and poisoning asphyxiation. Secondly, the construction causes less disturbance to the rock mass, maintaining better integrity and higher stability of the rock mass, which reduces the risk of rockfall injuries. Additionally, through the installation of a mine-mounted dust collector, the dust reduction effect at the excavation front is enhanced, further reducing the harm to miners from dust and waste generated during the excavation process.



Boom-type roadheader promoting green and safe development of mining work

## Land Disaster Control and Prevention

To ensure the safety of production and personnel, the Company and its branches (subsidiaries) have established and improved the mass monitoring and prevention system for hidden geological hazards. They have coordinated 19 mines in accordance with the provisions of the "Contingency Plan for Geological Hazards" to increase the number of key prevention and control areas listed at the county (city) level (17 in Gejiu mining areas and 2 in Maguan mining areas). They carry out regular pre-flood investigations, mid-flood inspections, and post-flood geological hazard hidden danger investigations, monitor relevant waste rock sites monthly, and regularly carry out annual propaganda and training on geological hazard prevention and control and emergency drills. This enhances their ability to recognize and report disasters, monitor and warn disasters, and avoid disasters and respond to emergencies.

### Establishing and Improving the System of Mass Monitoring and Mass Prevention of Geological Hazards, Ensuring the Safety of Production and Personnel Across All Locations with Digital Measures Case

The Company consistently adheres to the principle of prevention first, combining prevention with control. To timely discover, report, and handle potential disasters, the Company has implemented cascade slope control projects for 1920 geological disaster sites and Hualian Zinc Indium Manjiazhai open-pit mine according to the characteristics of slope rock mass. This includes table reinforcement, sloping, filling and leveling, greening and reforestation, forming a cascade slope to prevent slope instability.

In addition, Hualian Zinc Indium Manjiazhai Open-pit Mine has introduced important safety facilities such as the Leica TM30 measuring robot and slope real aperture radar to comprehensively carry out online monitoring and early warning of high-risk slope displacement. This greatly improves the prevention of geological disasters, achieves early prevention, early governance, and avoids the possibility of geological disasters.



Hidden danger investigation system

**2023**  
Key Performance

In 2023, the Company installed **29** monitoring points in **16** waste rock yards and used a total station to conduct over **100** inspections.



## Lean Management Empowering Diverse Values

The Company firmly believes that quality is the lifeblood of an enterprise. It adheres to the principles of honesty and legality in its production and business activities. Through continuous exploration and innovation, and active interconnection, it not only achieves win-win cooperation but also continually enhances the international influence of China's tin industry. With the aid of high-quality digital transformation and industrial development, the Company is committed to creating a higher quality product system and generating value for its customers.

### Responsive SDGs





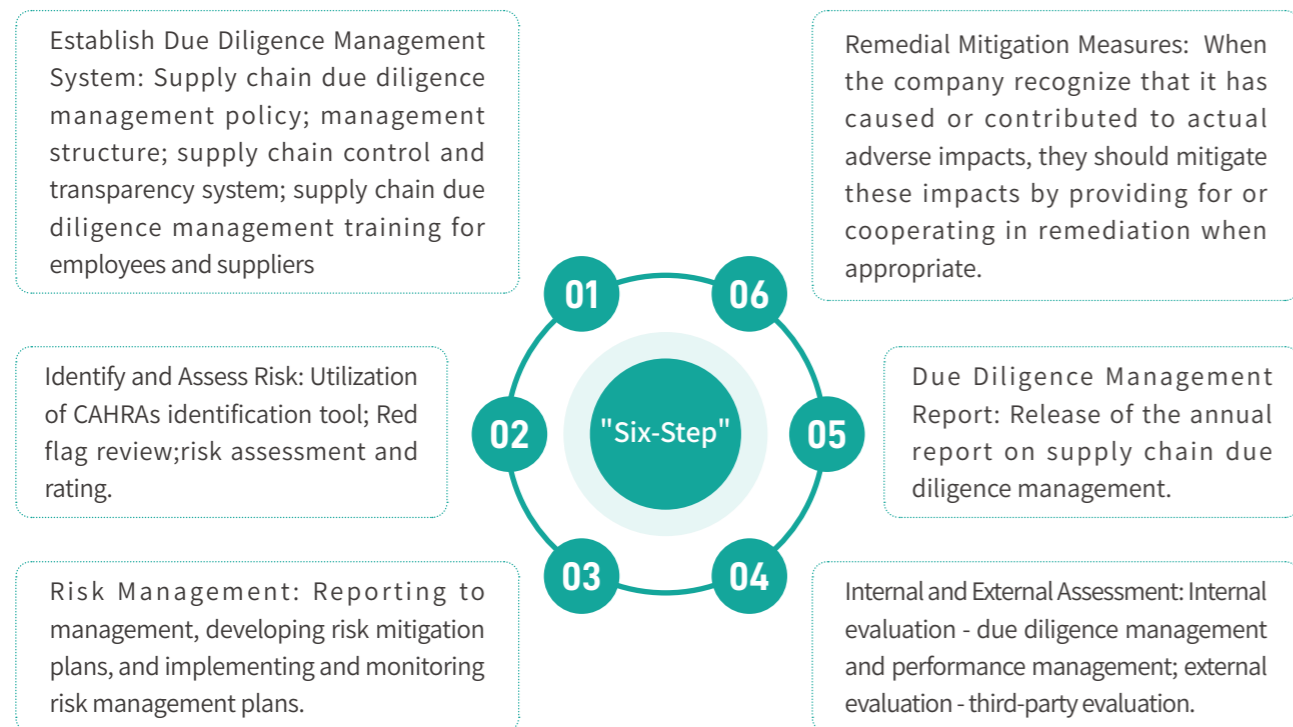
# Industrial Chain Management

## Supply Chain Due Diligence

A new wave of technological revolution has triggered countries to strengthen the control of critical mineral supply chains. The implementation of the EU Conflict Minerals Regulation, Battery Regulation, EU Human Rights and Environmental Due Diligence, and the London Metal Exchange (LME) Policy on Responsible Sourcing of LME-Listed Brands have led to a series of changes in global mineral supply chain rules.

To enhance the capability of due diligence management of the mineral supply chain and respond to market and customer expectations for supply chain compliance and responsible sourcing, the company has established a supply chain due diligence management working group. This group coordinates the management of relevant departments and subsidiaries. In accordance with the "OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas" and "Chinese Due Diligence Guidelines for Mineral Supply Chains" and other relevant standards, the Company has compiled supply chain due diligence management system documents. It continuously strengthens the implementation of supply chain due diligence management, formulates the "six-step method" for due diligence management process, and advocates for compliance, sustainability, and responsibility in supply chain management principles.

### "Six-Step" Supply Chain Due Diligence Management System Process



The Company actively communicates and cooperates with suppliers to convey OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas the Company's supply chain due diligence management policy, supplier code of conduct, etc. Through \*KYC supplier questionnaires, visits, emails, and other methods, the company assesses the actual business conditions of suppliers, including the compliance, stability, and business ethics.

### Supply Chain Due Diligence Management Policy Requirements

#### Serious Violations Related to Mineral Exploitation, Transport, or Trade

When sourcing or operating in "conflict-affected and high-risk areas", suppliers commit that they will not tolerate any form of torture, forced labor, child labor, other serious human rights violations and abuses, war crimes, or other serious violations of international humanitarian law.

#### On Direct or Indirect Support to Non-State Armed Groups

The Supplier undertakes that it will not tolerate any direct or indirect support to non-State armed groups through mineral extraction, transport, trade, handling, or export.

#### On Public or Private Security Forces

The supplier commits to refrain from providing direct or indirect support to public or private security forces that illegally tax or extort middlemen, exporters, or international traders.

#### On Money Laundering

The Supplier pledges to support or undertake measures to contribute effectively to the elimination of money laundering.

### Specialized Training on Supply Chain Due Diligence Management to Enhance Risk Handling Capabilities

Case

In March 2023, the Company conducted thematic sharing and module training on supply chain due diligence management. The training focusing on "The Top Ten Trends and Challenges of International Mineral Supply Chain Due Diligence Management", the "Responsible Sourcing Policy" of the London Metal Exchange, and the "Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains" of China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters. Through this training, the participating employees deepened their understanding of the requirements of supply chain due diligence management and the excellent practical within the industry. They gained greater awareness of the importance of supply chain due diligence management, thereby improving the company's risk identification, risk assessment, and risk control.



Special training on supply chain due diligence management

\*KYC (Know Your Customer) questionnaire assists in understanding suppliers and conducting compliance and due diligence questionnaires on suppliers. On this basis, an effective risk prevention system is established to help predict and avoid risks in time and maintain the efficient operation of the supply chain.

**The Company Supports Employees to Participate in Enterprise Internal Assessor Training to Strengthen the Internal Evaluation System** Case

From April to July 2023, the company delegated 14 employees to undergo training for internal auditors in responsible mineral supply chain management. The curriculum encompassed international mineral supply chain regulations, concepts of responsible management, ESG risks and responses, management processes, and hands-on drills, among others. Following three days of concentrated training, the participants thoroughly grasped the methodologies for constructing and operating the responsible management system of the mineral supply chain. They successfully passed the internal auditor's assessment and obtained the corporate internal auditor training certification. This facilitated the company's precise interpretation and application of the "Guidelines for Responsible Mineral Supply Chain Management in China" and its assessment tools, solidifying a robust foundation for the subsequent internal self-assessment of responsible supply chain management within the enterprise.



Internal assessor training for mineral supply chain responsible management enterprise



Internal assessor certificate

## Supplier Management

The Company manages the development, registration, evaluation, and exit stages of suppliers in accordance with supplier management measures such as the Procurement Management Measures, Supplier Management Measures, Electronic Procurement Platform Management Measures, and Procurement Evaluation Expert Management Measures. The Company manages the entire lifecycle of suppliers through the Yunnan Tin electronic procurement platform. It publishes Yunnan Tin procurement projects through the procurement platform, centrally displays electronic information, and conducts annual evaluations of registered suppliers.

### Supplier Selection

In accordance with the Management Measures for External Procurement of Metal Raw Materials of Yunnan Tin Co., Ltd. (Trial) and other management measures, the harmful elements in the concentrate raw materials to be purchased should meet the relevant requirements of "The specification for limit on harmful element content of the heavy metal concentrates products" (GB/T 20424-2006).

Suppliers should be aware of and voluntarily accept the Company's supply chain policy - the Supply Chain Due Diligence Management Policy of Yunnan Tin Co., Ltd. The Company adheres to the Responsible Sourcing Manual of Yunnan Tin Co., Ltd. and other relevant provisions. It completes the collection and preliminary review of necessary information such as risk identification of supply chain due diligence management, supplier management, procurement in conflict-affected and high-risk areas. It conducts compliance reviews and procurement recommendations in accordance with the Company's supply chain due diligence management mechanism before proceeding with raw material procurement negotiations.

### Supplier Evaluation

The supplier management unit conducts annual evaluations of registered suppliers. It evaluates and reviews the supplier's qualifications, operational status, credit rating, raw material quality, safety, human rights, compliance with local community relations, business ethics, environmental, and social impact, among others. In accordance with the principle of optimization, the Company selects excellent and qualified suppliers, eliminates unqualified suppliers, establishes a high-quality supplier database, and provides a reliable service guarantee for the Company's production and operation.

### Sunshine Procurement

The Company has established a procurement management system based on "company decision-making, unified management, and tiered responsibility". It implements procurement management in accordance with the principle of separation of decision-making, management, implementation, and supervision. Relying on its controlling shareholders, it continuously strengthens the construction of "one platform" and "one mall". It unifies supplier management, separates the three rights at the base level, and establishes a procurement risk prevention and control system. It intensifies procurement sourcing, optimizes the business environment, and requires registered suppliers to sign the "Compliance and Integrity Self-discipline Commitment", thereby continuously promoting sunshine procurement.

2023  
Key Performance

During the reporting period, the signing rate of the Supplier Code of Conduct reached as high as **100%**.

### Supplier Training

Based on actual needs, the Company periodically organizes relevant training for suppliers, such as training on the company's system, business ethics, anti-corruption, procurement system operation, etc.

**Supplier Due Diligence Management Training to Enhance Responsible Sourcing Awareness** Case

During the reporting period, the company continually strengthened its promotion and training on supply chain management norms during supplier visits. Through seminars and case studies, the company demonstrated to suppliers the specific steps for implementing effective risk assessments and due diligence measures. This initiative enhanced supply chain transparency and improved the due diligence management level across all participating links. It aided suppliers in understanding the requirements for supply chain risk management, business ethics, anti-corruption, and other compliance standards, actively promoting continuous improvement of the supply chain and collectively dedicating efforts to achieve a responsible tin industry chain.



Supplier visit and training

## Customer Service

Guided by the principle of "providing first-class service quality for customers," the Company offers flexible sales methods for tin ingots to meet the diverse needs of customers. Tin ingots can be sold in bundles (tons) or individually (ingots), providing supply chain support services for customers of self-produced tin ingots. In 2023, the Company conducted a customer satisfaction survey on Sn99.90A, Sn99.90AA, Sn99.95AA, and Sn99.99A tin ingot products. The overall satisfaction rate was 99.21%, an increase of 1.32% compared to 2022.

In terms of customer complaints, to improve the level of after-sales service, respond promptly to customer feedback, and enhance customer satisfaction, the Company has formulated the "Customer Complaints Handling Procedure of Yunnan Tin Co., Ltd. (Trial)". This procedure addresses general complaints, important complaints, and major complaints respectively. The sales units, production units, and market operation center are responsible for handling their respective complaints and coordinating with the relevant person in charge to resolve complaints.



Excellent Supply Chain Partner - Outstanding Contribution Award by China Baowu Group



Honorary certificate issued by China Baowu Group

## Technological Innovation

The Company deploys the innovation chain around the industrial chain, steadfastly implements the innovation-driven development strategy, and vigorously promotes technological innovation. It enhances the company's innovation capabilities by continuously strengthening investment in scientific research, gradually increasing efforts to attract talent, expanding cooperation in opening up to the outside world, accelerating the transformation of scientific and technological achievements, and focusing on breakthroughs in key core technologies.

## Technological Innovation Management

### Functional structure of scientific and technological work management

#### Strengthening Top-Level Design and Improving the Innovation System

The Company continually refines the functional positioning of decision-making, management, and execution levels to enhance the macro-management and overall coordination of technological innovation work. By improving the technological management institutions at the grassroots units, the Company achieves full coverage of technological management functions and forms a management model of hierarchical management and complementary advantages.

#### Improving the Incentive Mechanism and Management System

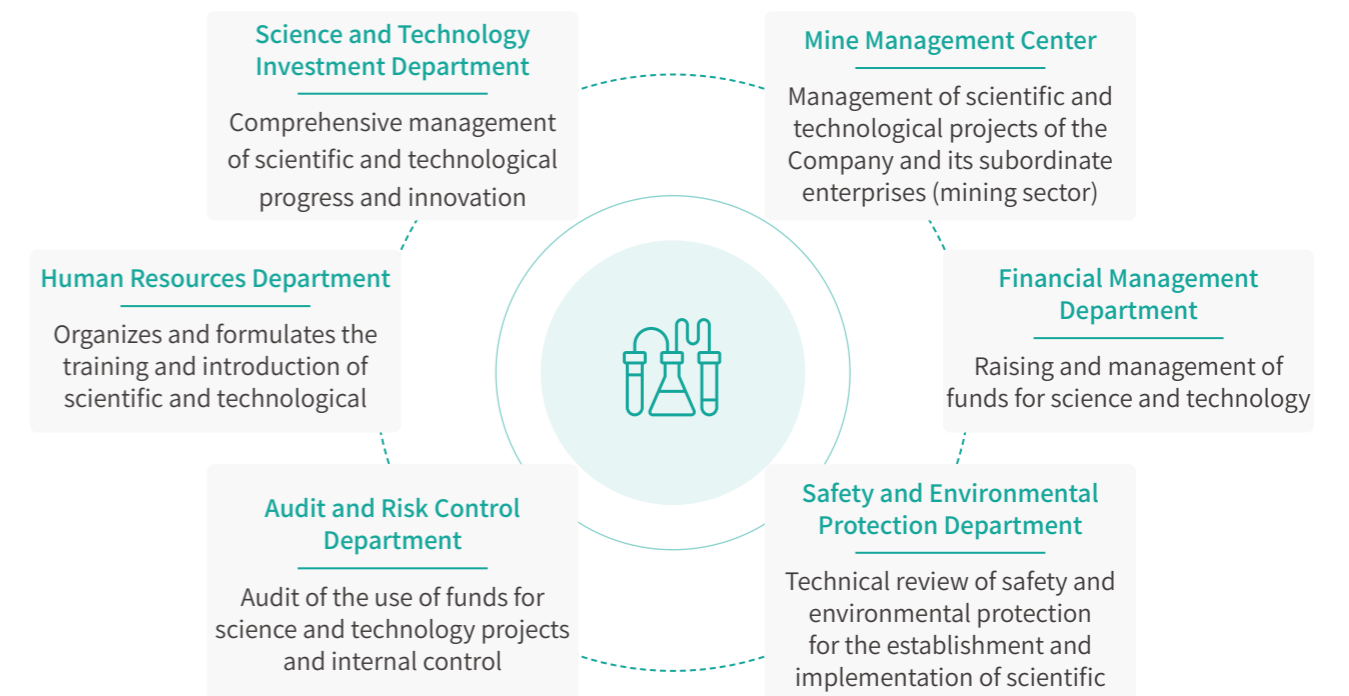
The Company revises the reward system, improves the evaluation criteria of technological innovation, and other technological innovation work systems. It continually strengthens system guidance and positive incentives to provide institutional guarantees for the construction of the innovation system.

#### Accelerating Innovation Drive and Creating an Innovation Engine

With technology as the link and projects as the carrier, the Company continually improves the allocation of technological resources, forms a strong synergy, and builds an innovative system that integrates technological research and development, transformation of achievements, personnel training, and open cooperation.

#### Strengthening the Layout of Standard Patents and Enhancing the Ability of Independent Innovation

Standards and patents are regarded as important contents and indicators of technological innovation, which run through all aspects of technology reserve, project research and development, achievement transformation, and application promotion.



## Intellectual Property Management

The Company places great emphasis on the protection and management of intellectual property rights. It has established norms for managing intellectual property work and integrates intellectual property work throughout the entire process of technological innovation. The Company consistently monitors the progress of science and technology, stays informed about relevant patent technology trends both domestically and internationally, promptly adjusts its research direction, and takes timely protective measures for intellectual labor achievements.

Scientific Research Project Preparation	Early Stage of Scientific Research Project	Interim Stage of Scientific Research Project	After the Occurrence of Patent Infringement
<ul style="list-style-type: none"> <li>The Company reviews relevant literature and patent literature both domestically and internationally. It analyzes and studies to enhance the accuracy of the project's research and development direction, optimizes the technical scheme and research route, improves research and development efficiency, reduces research and development costs, and avoids low-level repetition or infringement.</li> </ul>	<ul style="list-style-type: none"> <li>If the imported technology and equipment contain patents, the Company verifies and monitors the legal status of the patents in the exporting country and China in real time and reports to the competent authorities for examination and filing.</li> <li>Before exporting technology, products, and equipment to foreign countries, the Company analyzes the legal status of intellectual property rights, clarifies the patent legal status of the product in the place of sale and export, and avoids infringing on other people's patents</li> </ul>	<ul style="list-style-type: none"> <li>In joint venture and cooperative production and operation activities using technology developed domestically and internationally, the technology provider must submit the "China Patent Law Analysis Report".</li> <li>When signing a trade contract related to patents, the contract should specify that the partner should provide legal certification documents, corresponding legal liabilities, and compensation for losses.</li> </ul>	<ul style="list-style-type: none"> <li>The Company fully utilizes intellectual property information, applies the rules of the intellectual property system, and proposes proactive countermeasures.</li> </ul>

### Employee Intellectual Property Training Case

In 2023, the Company actively disseminated and implemented the Patent Law, Trademark Law, Copyright Law, Enterprise Intellectual Property Management Standards, and other laws, regulations, and basic knowledge. It conducted intellectual property publicity through the Company's intranet, trade union network, Yunnan Tin Youth WeChat platform, and other emerging media to improve employee participation and stimulate employee innovation enthusiasm.


## Technological Innovation Achievements

The Company has been deeply involved in the tin industry for 141 years. It boasts a group of leading talents in the mining, selection, smelting, and deep processing industries. Utilizing advanced and efficient mining equipment, the Company has developed a large number of mineral processing equipment and core technologies with independent intellectual property rights. Considering the Company's diverse types of minerals and their complex properties, the Company has successfully applied single or combined processes such as "flotation, magnetism, gravity" to separate ores based on different mineral characteristics, effectively improving the metal recovery rate.

Furthermore, the Company has developed technologies such as pre-smelting treatment, oxygen-enriched top-blown reduction smelting, fire-wet joint refining, slag fuming treatment and waste heat recovery, and Cansolv low concentration SO2 flue gas acid production. It has adopted process equipment primarily consisting of boiling furnaces, top-blown furnaces, electric continuous crystallization machines, and vacuum furnaces. The Company's equipment performance is excellent, product energy consumption is low, smelting level and safety factor are high, and the overall technology is at the world-leading level.

March 2023, the Company was successfully selected by the State-owned Assets Supervision and Administration Commission of the State Council to establish a world-class professional leading demonstration enterprise. It won three Yunnan Science and Technology Progress Awards, two first prizes of China Nonferrous Metals Industry Science and Technology Award, and received 54 patent authorizations.

### Major Innovation Achievements in 2023

 <p>First Prize of China Nonferrous Metals Industry Science and Technology Award</p>	 <p>First Prize of China Nonferrous Metals Industry Science and Technology Award</p>
 <p>Special Prize of Yunnan Science and Technology Progress Award</p>	 <p>Yunnan Science and Technology Progress Award</p>

# Quality Management

Quality is the cornerstone of the Company's operations and development. The Company adheres to the quality management philosophy of pursuing excellence, always striving to reward customers with superior product quality and excellent service.

In 2023, in accordance with a series of national laws, regulations, and norms such as the "Outline for Building a Strong Quality Country," and considering the actual operation of the Company's quality management, the Company optimized and integrated five management methods, including the "Quality Management System," at the level of Yunnan Tin. It redefined the Science and Technology Investment Department as the primary management department for quality, measurement, standardization, and leading organization system certification. At the same time, the Company clarified the management responsibilities of other relevant departments and made principled provisions on product service, measurement management, product identification management, quality accidents, and laboratory work to ensure that product quality meets customer needs.

2023  
Key Performance

During the reporting period, the internal control compliance rate of major smelting products was **99.77%** (planned  $\geq 96.50\%$ ).

The pass rate of quality indicators for the nonferrous metal smelting unit process was **95.24%** (planned  $\geq 91\%$ ).

The pass rate of internal testing was **97.81%** (planned  $\geq 95\%$ ).

The pass rate of external testing was **97.92%** (planned  $\geq 94\%$ ).

The pass rate of sample processing and testing was **97.71%** (planned  $\geq 95\%$ ).

The weekly inspection rate of measuring instruments was **99.89%** (planned  $\geq 96\%$ ).

In 2023, **66** batches of products were actually sampled and inspected, of which **7** batches were supervised and sampled by the state, and the pass rate was **100%**.

## Full Process Product Quality

The Company comprehensively inspects and monitors the quality of raw materials, the production process, and each product process. From the four dimensions of "Plan-Do-Check-Act", the risk points in the implementation process are systematically identified. The management process is systematically sorted out using flowcharts, and a scientific and reasonable management system and operation mechanism are established to ensure that the quality of products and services meets user needs.



Mineral Products

Mining units of the Company have established data monitoring for product sampling, measurement, moisture, main grade, and impurities for the quality of key mineral products from the aspects of mineral processing production and product warehousing. They have set up a daily supervision mechanism for product grade and a product delivery ledger to ensure the qualified rate of products leaving the factory.



Smelting Products

The Company carries out quality control of KPI performance indicators throughout the entire process for the incoming inspection of raw and auxiliary materials, the production process and its output quality, product quality inspection, and service process.

### "3I" Quality Management Operational Mode to Improve Product Quality Case

Hualian Zinc Indium Company effectively integrates the production process and quality control to form a "3I" (Industrialization + Informatization + Intelligence) quality management operational mode. The mining process realizes intelligent scheduling management of digital open-pit mines; the beneficiation process realizes the automatic analysis and adjustment of production process-related parameters to ensure the stability of the process flow and product quality standards; the terminal forms a large data analysis database, and the subsystems operate in coordination with each other to effectively integrate the production process and quality control. The first acceptance rate of the whole process is 100%, and the inspection rate of raw materials and products is 100%.

### Quality Management Training to Improve Employees' Quality Awareness Case

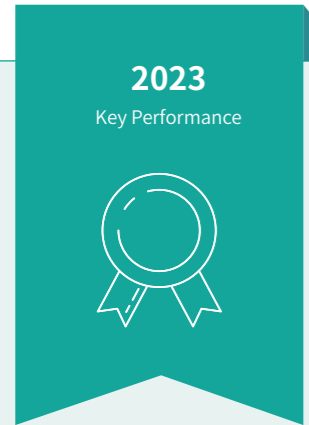
In September 2023, during the quality month activities, the Company actively organized a series of quality management activities, such as job skills and technical operation competition, total quality management knowledge sharing, quality laws and regulations, QC group activities, quality team building knowledge, production technology, lean management, 6S management, case analysis of quality management results, and quality management experience exchange. During the reporting period, the Company conducted a total of 146 quality knowledge training sessions, exchanges, and skills competitions, with 6,579 participants, effectively improving staff skills and quality management awareness.



Team quality knowledge and job skills training in 2023



Quality development policy publicity and implementation of Yunnan Administration for Market Regulation



During the reporting period, **12** groups were awarded Excellent QC Groups of Yunnan Province and Nonferrous Metals Industry.

**2** QC teams won the gold medal at the 48th International Convention on Quality Control Circles (ICQCC).

The QC achievement project "Improving the Capacity of a 30m Rotary Kiln to Process High Impurity Smoke and Dust" won the National Excellent QC Group.

The loading team of the Copper Branch was awarded the "Fifth Yunnan Provincial People's Government Quality Award Nomination Award".



CNAS Laboratory Accreditation Certificate of Datun Tin Mine



CNAS Laboratory Accreditation Certificate of Hualian Zinc Indium



Quality Management System Certificate of Yunnan Tin



Quality System Certificate of Hualian Zinc Indium



Quality Management System Certificate of Wenshan Zinc Indium

Optimizing Detection and Analysis Instruments to Improve Product Quality Analysis and Testing Efficiency Case

To enhance the efficiency of product quality analysis and testing and promote digital management to improve analysis quality, various production units of the Company have successively purchased and deployed detection and analysis instruments such as plasma emission spectrometers, X-ray fluorescence spectrometers, and high-frequency infrared carbon-sulfur analyzers.

The Agilent Inductively Coupled Plasma Optical Emission Spectrometer, purchased by Datun Tin Mine, has the capability to detect multiple elements simultaneously, with high speed, low detection limit, and high accuracy. The Dispersive X-Ray Fluorescence Spectrometer EDX-LE Plus, purchased by Kafang Branch for the laboratory of the Technical Management Center, has a fast analysis speed and a wide range, and does not produce substances harmful to the environment. The High-Frequency Infrared Carbon-Sulfur Analyzer can effectively address the impact of physical and chemical adsorption on low sulfur. It can determine a sample in one minute, improving efficiency while avoiding the physical harm to testing personnel from dangerous chemical reagents.



High-Frequency Infrared Carbon-Sulfur Analyzer



Inductively Coupled Plasma Optical Emission Spectrometer



Dispersive X-Ray Fluorescence Spectrometer EDX-LE Plus

Data Security Management

The Company promotes the application and efficient operation of system security. It has established the Network Security and Informatization Leadership Group of Yunnan Tin Co., Ltd., which coordinates the management of informatization projects, network security, and information systems. The Company has formulated regulations such as the "Network Center Computer Room Management Measures" and the "Company Digital Management Measures" to clarify the responsibilities of computer room staff. This strengthens the management of equipment, system security, and data security, such as hierarchical and classified management of the unit's data assets, and different security protection strategies for different levels of data.

To comprehensively improve the Company's information network security, the Company regularly conducts network security training for relevant staff to enhance their awareness of network security prevention. To efficiently manage the Company's information network, the Company promotes digital construction from various aspects and carries out digital upgrades for six software systems. These include the industrial Internet operating system, industrial safety and environmental protection management and control system, equipment asset management system, production and manufacturing management and control system, industrial cloud platform, and quality traceability management system. All of these have obtained computer software copyright registration certificates.

During the reporting period, the Company did not receive any complaints about infringement of customer privacy and loss of customer information.

# Industry Cooperation

The Company values cooperation with various parties, effectively linking industry resources, and actively carries out industry-university-research cooperation and talent exchange activities. This promotes industrial integration and high-quality development of the tin industry, and fully leverages the Company's leading role in the tin industry.

## Formulation of Industry Standards

The Company actively organizes and participates in the formulation and revision of standards related to product quality, analytical methods, and basic professional management for tin, copper, zinc, and indium. In 2023, the Company led and participated in the revision of one national standard, two industry standards, and four group standards.

Standard Name	Standard Number/Plan Number	Publication Date
Methods for chemical analysis of zinc concentrates—Part 25:Determination of indium content—Flame atomic absorption spectrometry	National Standard GB/T8151.25-2023	May 23, 2023
Determination of indium content in indium rich materials inductively coupled plasma atomic emission spectrometry	Industry Standard YS/T 1606-2023	August 26, 2023
Methods for chemical analysis of copper anode slime—Part 11: Determination of indium content—Flame atomic absorption spectrometry	Industry Standard YS/T 745.11-2023	April 21, 2023
Technical specification for green-design product assessment of indium ingots	Group Standard T/CNIA 0211-2023	December 01, 2023
Iron oxide by product in zinc hydrometallurgy	Group Standard T/CNIA0147-2023	July 26, 2023
Methods for chemical analysis of zinc stannate—Part 1: Determination of tin content—Potassium iodate titration	Group Standard, China Non-Ferrous Metals Industry Association Science and Technology [2023] No. 14: 2023-004-T/CNIA	
Methods for chemical analysis of zinc stannate—Part 2: Determination of zinc content—Na <sub>2</sub> EDTA titration method	Group Standard, China Non-Ferrous Metals Industry Association Science and Technology [2023] No. 14: 2023-007-T/CNIA	

# Industry Communication

The Company continuously strengthens exchanges and cooperation with authoritative scientific research institutions and universities, and jointly carries out research on world-class enterprise innovation projects to solve various technical problems related to key science and technology. In cooperation with Kunming University of Science and Technology, the Company has completed the project declaration of Yunnan Province's major scientific and technological project "Research and Development and Application Demonstration of Key Technologies in the Whole Industry Chain of Tin, Indium, and Arsenic (Phase I 2023)". This project involves research on the efficient use of complex tin-containing polymetallic mineral resources, realizing deep cooperation with complementary advantages.

## Participation in the International Tin Association's Asian Tin Week Case

In November 2023, the Company participated in the 2023 Asian Tin Week sponsored by the International Tin Association (ITA). In his speech, Han Shouli, Vice Chairman and General Manager of Yunnan Tin Group (Holding) Co, Ltd., pointed out that in the current context of profound and complex changes in the international and domestic environment, the tin industry also faces new challenges. These challenges require concerted efforts from all parties to maintain the healthy and sustainable development of the industry.



Han Shouli, General Manager of Yunnan Tin Group (Holding) Co, Ltd., delivering the opening speech at the conference

During the CEO dialogue segment, the Company's representative, Chen Xiongjun, discussed and spoke on hot topics such as the highlights of future demand growth in the tin industry, technological breakthroughs in Yunnan Tin, and industry trends. Furthermore, Zhang Zheyu, an analyst from the Company, delivered a keynote speech titled "Prospects for the Development of China's Tin Market" to further enhance the Company's international influence and promote the healthy and sustainable development of the international tin industry.



Representatives of the Company participating in the round-table discussion.

Participation in the Responsible Critical Minerals Supply Chain Round-table Conference

Case

In April 2023, the Company participated in the Responsible Critical Minerals Supply Chain Roundtable held at the headquarters in Germany. The Company introduced its own supply chain due diligence management system's construction and implementation, as well as its achievements in the development of green mines. It proposed further promotion of the "Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains" and mutual recognition with foreign standards. It emphasized that supply chain due diligence management is a process of continuous improvement and called for strengthening the participation of upstream and downstream enterprises in the supply chain to gradually promote standardized governance, thereby achieving sustainable development of the supply chain.



Responsible Mineral Supply Chain Round-table Conference

Participation in the International Forum on Sustainable Mineral Supply Chains

Case

To demonstrate the company's commitment to ESG and enhance its image in supply chain due diligence management to the international community, the Yunnan Tin delegation participated in the 2023 International Forum on Sustainable Mineral Supply Chains. As the largest domestic event focusing on the mining industry's ESG and mineral supply chain due diligence, the conference theme was "Strengthening Mining Governance, Building Supply Chain Partnerships, and Driving New Energy Transition." It provided an in-depth analysis and discussion of prevalent and challenging issues in mining and mineral supply chain management.

During the forum, the company engaged in keynote speeches and thorough discussions with NGOs, industry experts, and senior executives of leading companies on environmental protection and human rights issues within mineral supply chain management. They explored strategies to address ESG risks and challenges at the source mines, shared learning experiences, and further advanced industry development.



The Deputy Secretary of the Company's Party Committee delivering a keynote speech on "Digital Empowerment to Promote and Standardize Green Mine Construction"

The 13th China Tin Industry Chain Summit Echoes the Leading Voice of the Tin Industry

Case

In September 2023, Liu Luke, the Party Secretary, Chairman, and General Manager of the Company, led a team to attend the Tin Industry Chain Summit. He delivered an opening speech, highlighting that the tin industry is facing challenges such as unstable raw material supply and excess smelting capacity. He emphasized that the industry should seize opportunities to continuously broaden the application scenarios and fields of tin metal. The Company is committed to bearing the responsibility of "the nation's great", and seeks common development with colleagues in the tin industry. Furthermore, during the round-table price forum, Chen Xiongjun, the Deputy General Manager of the Company, discussed and spoke on issues such as the current situation of domestic tin ore supply, changes in downstream demand, and future development trends of the industry. This was done to further promote the high-quality development of the domestic tin industry.



Opening speech by Liu Luke, Chairman of the Company



# 5

## Caring for Employees and Fulfilling Mission Responsibilities

Employees are the foundation of a company and a crucial driving force behind its success. Yunnan Tin deeply implements the talent empowerment strategy in the new era. The Company is committed to attracting and retaining a diverse range of professional talents. It continually enhances the employee welfare system and implements measures to care for employees. The Company always regards the protection of employees' rights as a key aspect of corporate management. It pays high attention to employee health and safety, while also considering its social responsibility in the field of public welfare and charity. All these efforts contribute to the high-quality development of the Company.

### Responsive SDGs



# Talent Acquisition and Development

The Company has always placed a high emphasis on talent work. It has formulated the "Open Recruitment Management Measures for Human Resources" and continuously revised and improved the Company's recruitment system. It is clearly stipulated that discriminatory conditions such as ethnicity, race, gender, and religious beliefs must not be set during the recruitment process. The use of child labor is strictly prohibited, and all forms of forced labor are resisted, providing equal employment opportunities for all employees.

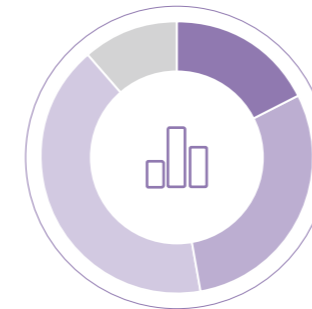
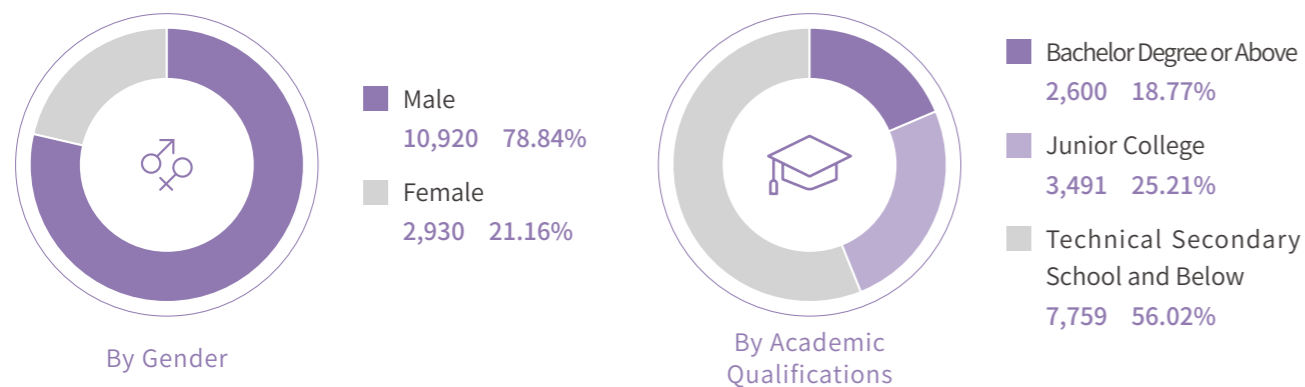
## Talent Philosophy

Guided by Xi Jinping's socialist ideology with Chinese characteristics in the new era, the Company deeply studies and implements the spirit of the 20th National Congress of the Communist Party of China and the important thoughts of General Secretary Xi Jinping on doing a good job in talent work in the new era. The Company is closely centered on the goal of creating a world-class professional leading demonstration enterprise, focusing on the key tasks of the Company's reform and development, and focusing on talent capacity building. The Company adheres to the integrated development of "introduction, cultivation, and utilization", sincerely attracting talents, diligently cultivating talents, and carefully utilizing talents.

Positive circulation strengthening the talent ecosystem



Key performance



By Age

51 Years and Above	2,449	17.68%	31 to 40 Years	5,737	41.42%
41 to 50 Years	4,095	29.57%	30 Years and Below	1,569	11.33%

2023  
Key Performance

Employing **4,930** ethnic minorities employees, accounting for **35.6%** of the company

Employing **652** Veterans, accounting for **4.71%** of the company

During the reporting period, the Company had **1,197** professional and technical personnel with intermediate or above professional titles, and **418** professional and technical personnel with technician or above professional skills. Among the registered employees, there were **7** instances of national talent award recognition, **141** instances of provincial and ministerial talent recognition, and **62** instances of prefectural talent recognition. Specifically, there were **4** individuals who received a special allowance from the State Council, **6** individuals who received a special allowance from the provincial government, **1** individual recognized as a leading figure in science and technology, **2** individuals recognized as national technical experts, and **8** individuals recognized as Yunling Chief Technicians.

## Talent Development

To ensure the successful realization of the Company's "14th Five-Year Plan" talent development goals and to enhance the comprehensive quality and professional skills of the staff, the Company has issued and implemented the "Cadre and Talent Exchange and Training Work Program". The Company has also formulated the "2023 Annual Staff Training Plan", which provides layered and categorized systematic training for talents, precisely customizes differentiated talent training, and promotes the construction of a talent echelon.

Measures for talent team training

<p><b>Strengthen the construction of cadre and talent echelon</b></p> <ul style="list-style-type: none"> <li>• Complete the cadre and talent team database construction and entry</li> <li>• Intensify the exchange and training of cadres</li> <li>• Strengthen the construction of the young cadre team</li> </ul>	<p><b>Increase the intensity of talent introduction</b></p> <ul style="list-style-type: none"> <li>• Complete the recruitment task of the National Recruitment Action</li> <li>• Compile an annual recruitment plan</li> <li>• Increase the introduction of urgently needed professional talents</li> </ul>	<p><b>Promote the construction of a comprehensive, three-dimensional training system</b></p> <ul style="list-style-type: none"> <li>• Improve and refine the "Ten Core Backbone" training project</li> <li>• Complete the post-training skills competition</li> </ul>
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Conducting Training for Excellent Management Personnel to Strengthen the Capacity Building of Relevant Staff Case

The Company places a high emphasis on talent training programs. In September 2023, to holistically enhance the comprehensive quality and business capabilities of human resources practitioners, the Company conducted a specialized training course for the Human Resources Department titled "Learning from Huawei: Talent Management and Compensation Management - Concepts and Practices". This course explored the practical experience of Huawei's talent training and compensation performance management. A total of 27 individuals participated in the training, laying a solid talent foundation for the Company's development.

In September 2023, Datun Tin Mine organized a training course for excellent managers for the year 2023. The training was attended by a total of 49 individuals. Managers underwent in-depth training in three dimensions: goal setting, performance management, and problem-oriented thinking and analysis methods. This served to further enhance the professional competence and leadership abilities of the managers.



Special training on human resource management



Training for excellent management personnel



Organizing Internal Trainer Training to Elevate the Team's Training Level Case

In May 2023, to enhance the ability of internal trainers in planning, developing, organizing, and implementing internal training, and to further improve the training skills of the internal trainer team, the Company conducted internal trainer training at Datun Tin Mine. The training was attended by a total of 38 individuals and lasted for 10 days. This successfully cultivated an innovative team of internal trainers to better serve the long-term sustainable development of the Company.



Skill enhancement for internal trainers in the Company

During the reporting period, the average duration of training received by the Company's employees was **58.42** hours.

The "Ten Core Backbones" training program of Tin Co., Ltd. trained **6,653** employees.

2023  
Key Performance

# Employee Compensation and Benefits

The Company values the collective sense of belonging among employees. To build a cohesive enterprise, the Company strictly implements the salary, benefits, and other welfare provisions that employees are entitled to enjoy as per the relevant state regulations. The Company provides all-round care for its employees, covering welfare aspects such as caring for employees in difficulty and female employees, expressing condolences to retired employees, and organizing cultural activities.

## Performance Pay

The Company adopts a "market-oriented mechanism construction" approach, striving to optimize the construction of a market-oriented performance pay management system. The Company continuously improves the assessment and incentive system, adheres to strategic guidance and target traction, and comprehensively reforms the talent development system in combination with the contributions of various units in the industrial chain and value chain.

### Market-oriented performance pay management system

#### Building a Dual-channel Development System

- The Company has issued and implemented the "Measures for the Management of Staff Rank (Level) and Salary Grade at the Headquarters (Trial)" and the "Measures for the Management of Salary at the Headquarters (Trial)".
- A rank (level) promotion mechanism has been established, with personal annual performance as the core and personal education, professional title, professional (practicing) qualification promotion, and honor as other elements.

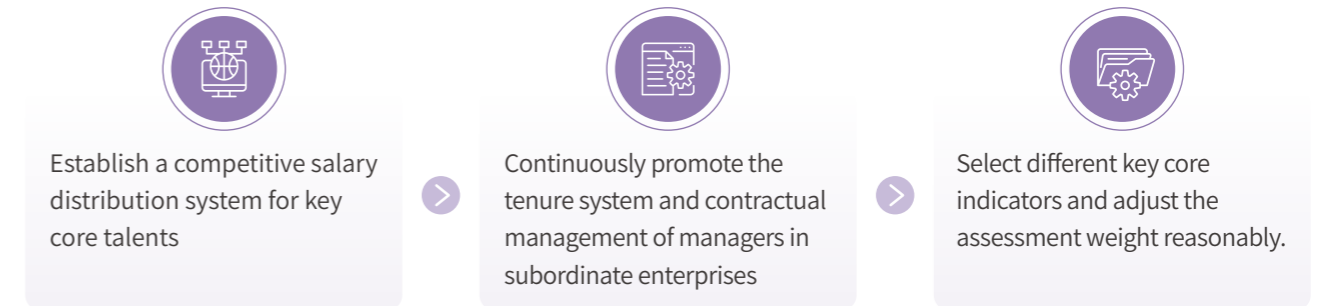
#### Optimizing the Salary Distribution Mechanism

- The Company has issued and implemented the "Measures for the Management of Total Wages" and the "Measures for the Performance Appraisal and Salary Management of Middle-level Managers".
- The Company has signed a personalized annual business performance responsibility letter with each affiliated unit to match the business performance assessment objectives and targets.

#### Strengthening the Process Management of Total Wages

- The Company has strictly implemented the total wage assessment method. This includes monthly strict management, real-time tracking and adjustment of abnormal indicators, and continuous strengthening of performance appraisal.
- The Company has effectively implemented performance-oriented salary setting by classification, ensuring the inclination of salary and salary growth rate of major production positions such as mining front line and key value creators.

### Assessment and incentive system



## Employee Welfare and Care

The Company places great emphasis on the humanistic care of its employees, continuously enhancing the employee welfare system, and striving to boost the sense of happiness and belonging among its employees. The Company provides all employees with "five insurances and two funds", and additionally offers employees benefits such as supplementary insurance for serious illnesses and mutual medical assistance. These measures aim to alleviate the financial burden caused by illness. The Company also conducts a series of activities to integrate employee care into its corporate culture.

### Five Insurances and Two Funds



### Conducting "June 1st" Parent-Child Activities to Deepen Emotional Connections within Employees' Families Case

In June 2023, to provide the children of employees with a unique "June 1st" International Children's Day experience, the Company's union organized a parent-child care activity titled "Entering the Workplace of Parents". By guiding children to visit their parents' workplaces, they could appreciate the importance and challenges of their parents' roles, understand their hard work, and thereby foster stronger emotional bonds between parents and children, reduce the distance between them, and cultivate a sense of gratitude in the children.



"June 1st" Children's Day Parent-Child Care Activities

Organizing Summer Cooling Activities to Enhance Care for Frontline Employees

Case

In June 2023, the Datun Tin Mine Labor Union carried out an activity titled "Labor Union Warmth Enters Thousands of Homes", delivering cooling refreshments to the production frontline. The union distributed summer comfort items to 790 frontline employees. This gesture not only provided the employees with a respite from the summer heat but also stimulated their work enthusiasm and strengthened team cohesion and centripetal force.



"Labor Union Warmth Enters Thousands of Homes" cooling activities

Conducting Double Festival Care and Support Activities for Special Employee Groups

Case

To further extend care to employees, the leaders of the Company visited employees in difficulty, retired veteran cadres, and disabled workers during the Spring Festival and National Day. They disseminated the Company's assistance policies to them and distributed consolation items such as rice and cooking oil. In the future, the labor union will continue to devote efforts to assist employees in difficulty and vulnerable groups, striving to enhance their sense of achievement, happiness, and belonging.



Liu Luke, Chairman of the Company, consoling employees in difficulty



Zhang Yang, Deputy Secretary of the Party Committee, consoling employees in difficulty



Wang Jianwei, Deputy General Manager, consoling employees in difficulty



Chen Xiongjun, Deputy General Manager, consoling employees in difficulty

## Employee Rights and Interests

The Company is committed to enhancing the protection of employees' rights. The Company continually refines the grievance mechanism for labor rights and interests, consistently focusing on the mental health of employees. It places high importance on human rights issues such as anti-coercion and anti-discrimination, intensifying the promotion of topics related to human rights, and fostering a correct understanding of human rights among its employees.

Conducting Mental Health Lectures, Focusing on the Holistic Development of Employee Health

Case

The Company actively organizes various activities aimed at improving the physical and mental health of its employees. In November 2023, the Company invited Professor Yu Fang, the chief expert of the Yunnan Mental Health Service Project, to conduct a special lecture titled "Listening to Emotions and Releasing Pressure" and group psychological counseling at the Company's headquarters. Over 50 employees from the Company's headquarters attended the lecture. This lecture and psychological counseling played a positive role in helping employees alleviate work pressure, enhance mental health levels, and strengthen team cohesion. It allowed employees to gain a more intuitive understanding of the importance of mental health and learn to apply psychological knowledge to adjust their mindset in daily work and life.



Professor Yu Fang's lecture on mental health knowledge

## Employee Health and Safety

The Company fully implements the important instructions and directives on production safety by General Secretary Xi Jinping, adheres to the work arrangements of the national and provincial production safety teleconferences, and continuously builds and improves the standardization system of occupational health and safety management and production safety. The Company establishes and perfects the responsibility system for safety management and occupational disease prevention and control, strengthens the primary responsibility for safety management and occupational disease prevention and control, and implements various occupational health and safety management measures, providing a solid foundation for achieving safety strategic objectives.



Occupational Health and Safety Management System Certificate



Production Safety Standardization Certificate of Datun Tin Mine and Kafang Branch

### Occupational health and safety objectives



### Contents of "three-level safety education" of contractors

The Company has established a "one person with one file" system for safety education and training, allowing admission only after passing the training examination.

Employees must undergo professional training, pass the examination, and obtain 100% of the relevant qualification certificates before they can start their jobs.

Contractors are required to pay industrial injury insurance for all their employees.

### "Everyone Talks About Safety, Everyone Knows Emergency Response" Production Safety Month Case

To enhance employees' awareness of safety in production, the Company organized the "Production Safety Month" activities. This included a series of initiatives such as fire safety promotion, signing production safety commitment letters, and conducting assessments and supervision of safety and environmental responsibility certificates. The Company also organized all employees to participate in online activities for Production Safety Month through related APPs. Through engaging participation methods such as online knowledge contest scoring, posting short videos on Kuaishou, watching live videos of "Escape Drill Training Camp" and signing in, the number of employees participating in the training significantly increased, effectively enhancing employees' safety awareness.

During the reporting period, a total of 11,949 employees participated in the online knowledge contest themed "Everyone Talks About Safety, Everyone Knows Emergency Response". Additionally, 11,528 employees participated in the online "Escape Drill Training Camp" activities, and 13 short videos of safety popular science knowledge of "Escape Drill Training Camp" were organized and filmed. This allowed employees to learn safety knowledge in a relaxed and pleasant atmosphere and improve their self-protection ability.



"Escape Drill Training Camp" and online knowledge contest



Launching Ceremony of "Production Safety Month"

Organizing the "Safety First" Speech Contest to Shape Employees' Production Safety Concept Case

Through a series of measures, the Company has formed a comprehensive and three-dimensional publicity approach with wide channels, multiple angles, and abundant content, effectively enhancing workers' awareness of occupational health self-protection. During the reporting period, to enhance employees' awareness of production safety and the hazards of occupational diseases, the Company actively carried out various types of safety training. The Company organized and watched 51 events including the "10.15" Major Roof Accident Warning Educational Film of Fusheng Coal Mine in Fuyuan County and the "10.15" Major Water Disaster Accident Warning Educational Film of Xinglong Coal Mine in Zhenxiong County, with a total of 3,815 participants.

In addition, the Company organized the "6.16" Safety Publicity Consultation Day activities, distributed more than 2,500 copies of production safety knowledge manuals, placed 8 popular science exhibition boards, and answered and explained production safety knowledge for more than 200 people for the broad masses of workers and the public. The Company organized 440 public safety commitments, totaling 1,618 participants; seventeen publicity activities of "I Know the Risk of Hot Work" were carried out, with a total of 530 participants. These measures further strengthened the main responsibility of occupational disease prevention and production safety in enterprises, and effectively guaranteed the health rights and interests of the majority of employees.



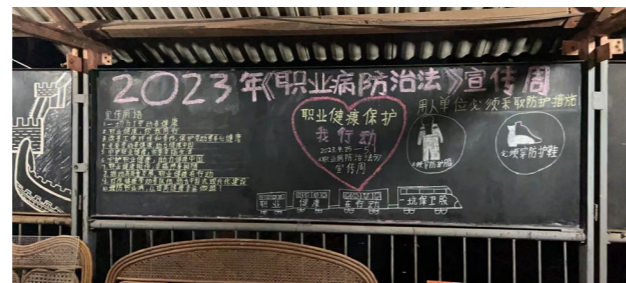
"Safety First" speech contest



"Production Safety Consultation Day" activities



"Occupational Disease Prevention Law Publicity Week" activities



2023 Key Performance

During the reporting period, the Company conducted a total of **8,949** safety knowledge promotion and safety training activities, with a total of **249,871** participants. Additionally, **961** safety and emergency science videos were released online, with **1,016** participants attending live webcasts.

## Community Communication and Public Welfare

Participation in social communication and the development of public welfare initiatives are important components of the Company's social responsibility. Participation in social communication and the development of public welfare initiatives are important components of the Company's social responsibility. In the course of conducting business, the Company focuses on actively maintaining relationships with the local community. This is achieved by actively assisting community residents with tasks such as road construction for farming, water delivery and water conservancy repairs, equipment repair assistance, and local employment support. These efforts have helped establish a relationship of mutual trust and support with local community members.

Furthermore, the Company will continue to strengthen its support for rural revitalization initiatives. This includes thoroughly implementing the spirit of the 20th National Congress of the Communist Party of China and the important expositions of General Secretary Xi Jinping on rural revitalization. The Company continues to promote the consolidation and expansion of poverty alleviation achievements and effectively links up with rural revitalization. This further aids the development of linked industries, infrastructure construction, and improvement of living environments.

Promoting Local Industry Revitalization and Supporting the Development of Characteristic Industries Case

During the reporting period, in order to assist impoverished individuals in increasing their income, the Company invested CNY 535,000 in local industries to improve the quality and efficiency of 500 mu of tea and 1,000 mu of star anise. The Company distributed 5,000 chicks, 10,000 ducklings, and 5,000 goslings. It also trained one individual to lead in planting and one to lead in breeding to become wealthy. The Company made a directional purchase of 37.42 tons of terraced red soft rice, worth CNY 484,900, continuing to do a good job of industrial assistance.



On-site verification of tea quality and efficiency improvement



On-site verification of star anise quality and efficiency improvement



Red soft rice seedling planting site



Poultry hatchlings breeding situation



Datun Tin Mine received a banner of honor from local residents.

Strengthening Infrastructure Upgrades and Creating a Beautiful Community Together Case

During the reporting period, to promote the implementation of the assistance objectives for Mazong Village, the Company invested CNY 1.1402 million in infrastructure construction assistance funds. The focus was on hardening 436 meters, (approximately 1,220 square meters) of production roads across four village groups, repairing 501 meters of guardrails, 1,621 meters of drainage ditches, and 674.5 square meters of retaining walls. The completed "Huinong Bridge" benefits 10 villager groups across four village committees. The Company also invested CNY 100,000 in 12 villager groups to carry out special activities for environmental sanitation management and green village construction, continuously promoting infrastructure construction.



Inspection at Huinong Bridge



Repair of guardrail

Continuously Strengthening Specialized Work and Timely Understanding of Assistance Situations Case

During the reporting period, to ensure precise and detailed assistance measures, the Company's village team conducted household visits at least once a month, regularly assessing and reporting on the village's poverty situation. As of now, there are no individuals in Mazong Village with a per capita net income of less than CNY 10,000. To effectively carry out "Nurturing Wisdom and Fostering Aspirations", the Company conducted welder technical training and issued certificates to 45 qualified trainees. It mobilized five village cadres to upgrade their academic qualifications and organized relevant scientific and technological personnel to conduct batch training on planting knowledge for approximately 1,600 farmers in Mazong Village. This has effectively enhanced the farmers' planting techniques and pest control technology.



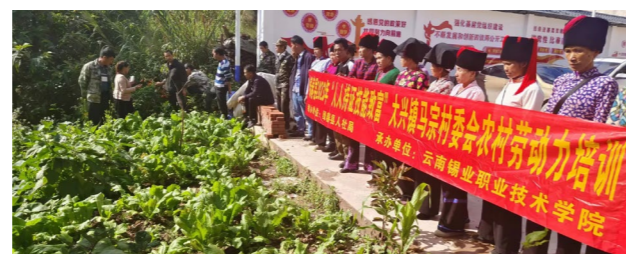
Collection of household information by the village team



Household visits by the village team



Planting theory training



Labor training

Party Building Leadership and Paired Assistance Case

To strengthen the role of Party building leadership and effectively carry out the mutual pairing and co-construction work between the Company and Mazong Village, the Company has deployed all 8 members to the village work team to complete rotation tasks. The Company organized three sessions of professional theoretical knowledge training for 13 Party branch secretaries and Party workers, and resolved 36 practical difficulties and accomplished 32 practical tasks for the masses. During the reporting period, the Company donated more than 100 volumes of Party knowledge books to the Mazong Village Party and Mass Service Center. The village work team members saved over CNY 140,000 of work funds to timely resolve temporary and emergent difficulties for villagers, equipped the village committee with some office equipment, and continuously promoted Party building assistance.



Group leaders meeting with village team members in a symposium



Party building knowledge books

2023  
Key Performance

During the reporting period, the Company directly invested CNY **1.7752** million in assistance funds, consumed and assisted with CNY **478,700** worth of agricultural products, and invested CNY **20,200** in other items, totaling CNY **2.2741** million.

The Company actively developed **91** new public welfare posts.



# Key Performance

## Corporate Governance

Disclosure Item		Unit	Data Filling			
			Year 2021	Year 2022	Year 2023	
Corporate governance	Number of general meeting of stockholders	times	3	4	5	
	Number of board meetings	times	9	9	9	
	Number of members of the board of directors	persons	11	8	8	
	Disclosure by gender	Male director	persons	9	6	7
		Female director	persons	2	2	1
	Disclosure by type	Independent director	persons	4	3	3
		Independent director	persons	7	5	5
	Number of meetings of the board of supervisors	times	9	9	9	
	Number of meetings of the Strategic Development Committee	times	4	4	5	
	Number of meetings of Audit Committee	times	9	8	8	
Number of meetings of Nomination Committee	times	0	2	4		
Number of meetings of Remuneration and Appraisal Committee	times	1	2	3		
Operating performance	Economic indicator	Operating income	RMB 10,000 Yuan	5,384,432.41	5,199,784.41	4,235,925.65
		Net profit	RMB 10,000 Yuan	303,826.91	157,015.58	152,642.93
		Total tax payment	RMB 10,000 Yuan	182,914.09	230,101.86	142,337.28
		Total cash dividends (including tax)	RMB 10,000 Yuan	18,103.82	19,749.62	42,790.85
		Cash dividend for every 10 shares	RMB 10,000 Yuan	1.10	1.20	2.60

## Environment

Disclosure Item		Unit	Data Filling		
			Year 2021	Year 2022	Year 2023
Energy consumption	Natural gas	cubic metre	9,276,054	8,379,621	7,806,890
	Raw coal	ton	125,880	127,926	132,544
	Diesel	litre	25,972	23,880	24,981
	Gasoline Note: The gasoline/diesel consumption of vehicles, only including the company-owned vehicles, excluding third-party transport vehicles"	litre	198	192	176
	Renewable energy	KWh	1,599,870,300	1,618,126,067	1,750,007,924
	Purchased electricity Note: If there are any overseas operations, please indicate separately the purchased electricity in these countries or regions."	KWh	1,919,218,392	1,973,324,472	2,011,503,361
Gas pollutant emission	Total exhaust emission	cubic metre	8,313,513,882	7,448,635,809	7,579,004,072
Water resources usage	Groundwater usage	cubic metre	4,305,553	4,018,195	1,571,053
	Circulating water consumption	cubic metre	108,690,331	124,734,207.10	218,560,009
Water pollutant discharge	Total wastewater discharge	cubic metre	3,262,550	2,643,888	1,173,681
Environmental protection investment	Environmental protection investment	RMB 10,000 Yuan	37,659	46,582	34,324
Greenhouse gas emissions	Direct (Scope I) greenhouse gas emissions	ton		1,181,631.80	754,898
	Indirect energy (Scope II) greenhouse gas emissions	ton		804,099.10	837,352

## Products and Services

Disclosure Item		Unit	Data Filling		
			Year 2021	Year 2022	Year 2023
Product liability and services	Number of complaints received about products and	pcs	7	11	0
	Product percent of pass	%	100	100	100
	Customer satisfaction	%	98.51	99.3	99.5
Innovation and intellectual property protection	Number of patents held	pcs	351	326	353
	Number of invention patents held	pcs	133	100	86
	Number of annual new patents	pcs	78	57	60
	Number of trademarks held	pcs	40	40	40

## Employee

Disclosure Item		Unit	Data Filling			
			Year 2021	Year 2022	Year 2023	
Employee rights and interests	Proportion of labor contract signing	%	100%	100%	100%	
Employee employment	Total number of employees Note: The number of employees as of the end date of this fiscal year, the same below"		persons	16,243	15,473	13,850
	By gender	Male	persons	12,728	12,116	10,920
		Female	persons	3,515	3,357	2,930
	By employment type	By labor contract	persons	15,878	15,400	13,781
		By labor dispatch	persons	310	66	57
Others		persons	55	7	12	

Disclosure Item			Unit	Data Filling		
				Year 2021	Year 2022	Year 2023
Employee employment	By age	5151 years old and above	persons	2,797	2,760	2,449
		415041 to 50 years old	persons	4,451	4,227	4,095
		314031 to 40 years old	persons	6,656	6,460	5,737
		3030 years old and below	persons	2,339	2,026	1,569
	By academic qualifications	Bachelor degree or above	persons	2,631	2,730	2,600
		Junior college	persons	3,862	3,788	3,491
		Technical secondary school and below	persons	9,750	8,955	7,759
	By employee category	Proportion of grass-roots employees	%	99.24%	99.32%	99.38%
		Proportion of female employees in middle management	%	13.79%	15.96%	15.58%
		Proportion of female employees in senior management	%	20.00%	16.67%	16.67%
	Number of minority employees		persons	5,239	5,129	4,930
	Number of disabled employees		persons	138	124	118
	Employee turnover rate	Total number of employees leaving the company Note: It includes those who voluntarily leave, as well as those who terminate their employment relationship with the company due to layoffs, retirement, death, etc., the same below		persons	774	1,280
Employee turnover rate		%	4.55%	7.64%	5.54%	

Disclosure Item			Unit	Data Filling		
				Year 2021	Year 2022	Year 2023
Employee turnover rate	By gender	Number of male employees leaving the company	persons	604	973	643
		Number of female employees leaving the company	persons	170	307	170
	By age	51Number of employees leaving the company aged 51 and above	persons	414	650	601
		4150Number of employees leaving the company between 41 and 50 years old	persons	169	322	123
		3140Number of employees leaving the company between 31 and 40 years old	persons	122	190	46
		30Number of employees leaving the company aged 30 and below	persons	69	118	43
	By region	Number of employees leaving the company from Chinese mainland	%	773	1,278	813
		Number of employees leaving the company from Hong Kong, Macao and Taiwan	%	1	0	0
		Number of employees leaving the company from other countries and regions	%	0	2	0

Disclosure Item			Unit	Data Filling		
				Year 2021	Year 2022	Year 2023
Employee turnover rate	By employment type	By labor contract	%	748	1,062	809
		By labor dispatch	%	21	208	3
		Others	%	5	10	1
Employee training	Total number of employees trained		persons	16,243	15,473	13,850
	Average duration of training for employees		hours	50	50	58
	Total number of employees receiving safety training		persons	16,243	15,473	13,850
	Average duration of safety training for employees		hours	27.62	30.86	23.54
	Total number of employees receiving environmental training		persons	16,243	15,473	13,850
	Average duration of environmental training for employees		hours	4.22	4.78	8
	ESGAverage duration of ESG training for employees		hours	37.53	41.93	40.37
	Total investment in employee training		Yuan	9,501,309.70	7,535,543.67	14,267,384.40
	By gender	Total hours of training for male employees	hours	678,826	648,185	518,674
		Total hours of training for female employees	hours	126,378.20	118,523.50	165,361.60
	By employee type	Total hours of training for grass-roots employees	hours	795,704.20	756,470.50	675,539.00
		Total hours of training for middle management employees	hours	9,135	9,372	7,711
		Total hours of training for senior management employees	hours	614	144	1,744

## Relationship between Industry and Community

Disclosure Item		Unit	Data Filling			
			Year 2021	Year 2022	Year 2023	
Employee health and safety	Employee health	Number of employees in occupational disease risk positions	persons	777	745	699
		Number of employees participating in physical examination of occupational diseases	persons	9,143	10,405	8,239
		Number of employees with occupational diseases	hours	9	9	8
		Social insurance coverage rate	%	100%	100%	100%
	Safety accidents and personnel	Number of employment injuries	persons	50	30	30
		Number of employment injury accidents	case	50	30	28
	Employee health and safety	Safety accidents and personnel	Number of working days lost due to employment injuries Note: Days of absence due to employment injuries"	Day	2,609	1,515
Employment injuries per million working hours			%	1.8351	0.9589	1.0441
Rate of lost working hours per million working hours			%	683.9691	374.8840	745.9928
Investment in employee's occupational health and safety			RMB 10,000 Yuan	19,672	36,614	23,006

Disclosure Item		Unit	Data Filling		
			Year 2021	Year 2022	Year 2023
Supply chain management	Total number of suppliers	suppliers	5	4	4
	Percentage of suppliers who have signed clauses containing environmental and labor requirements	%	100	100	100
	Number of suppliers who have carried out social impact assessment	suppliers	3	2	3
	Number of suppliers who have carried out environmental impact assessment	suppliers	3	2	3
	Total number of annual new suppliers	suppliers	2	1	2
	Expenditure proportion of local suppliers' procurement	%	20	25	25
	Social welfare	Rural revitalization capital investment	RMB 10,000 Yuan	184.44	254.22

# Index of Indicators

	GRI	CASS-ESG5.0	SDGs
<b>Chapter I - Opening</b>			
1.1 About This Report	G2-1; G2-2; G2-3; G2-14	P1.1; P1.2; P1.3; G3.7	
1.2 Responsibility Statement		P2.1; P2.2	
1.3 Introduction to Yunnan Tin	G2-6	P3.1; P4.1; P4.2; P4.3; G3.11	
1.4 The Company's Journey Towards Sustainability	G2-16; G2-22; G2-29	G2.1; G3.5; G3.6	
Special Topic: Leading High-Quality Mine Development through Digital Intelligence		S4.2; S4.6; V2.2	
<b>Chapter II - Steady Operation and Laying a Solid Foundation for Development</b>			
2.1 Corporate Governance	G2-9; G2-10; G2-12; G2-17	G1.1; G1.2;	
2.2 Investor Relations Management		G1.10	
2.3 Compliance and Risk Management	G2-12	G1.3; G1.4	
2.4 Integrity and Self-Cultivation	G205-1; G205-2	G1.6; G1.7; G1.8; G1.9	
2.5 Party Building Leadership			
<b>Chapter III - Guarding the Earth and Drawing a Picture of Green Prosperity</b>			
3.1 Biodiversity	G101-1; G101-2; G101-4; G101-5; G101-6; G101-7; G101-8; G301-1	E1.5; E4.1; E4.2; E4.3; V4.4; V4.5	
3.2 Tailings Pond Management	G306-1; G306-2	V4.4	
3.3 Climate Response Actions	G305-1; G305-2; G305-5	E2.4; E2.5; E5.1; E5.4; E5.5; E5.6; V4.1; V4.2; V4.3	
3.4 Mineral Resources Protection		V1.1; V1.3; V2.6	

	GRI	CASS-ESG5.0	SDGs
<b>Chapter IV - Leading with Environmental Responsibility and Green Mission</b>			
4.1 Environmental Management		E1.1; E1.2; E1.6; E1.7	
4.2 Resource Management	G302-1; G302-3; G302-5; G303-2; G303-3; G303-5	E2.1; E2.2; E2.3; E2.9; E2.10; E2.11; E2.12; E2.13	
4.3 Emission Management	G305-7; G306-1; G306-2; G306-3; G306-5	E3.1; E3.2; E3.3; E3.4; E3.5; E3.6; E3.8; E3.10	
4.4 Environmental Safety		E1.4; E1.8	
<b>Chapter V Lean Management - Empowering Diverse Values</b>			
5.1 Industrial Chain Management	G308-1	S4.5; S4.7; S5.1; S5.2; S5.6	
5.2 Technological Innovation		V2.1; V2.4	
5.3 Quality Management		S4.1; S4.2; S4.6	
5.4 Industry Cooperation		V2.5; V2.7; V2.8	
<b>Chapter IV - Caring for Employees and Fulfilling Mission Responsibilities</b>			
6.1 Talent Philosophy	G2-7; G401-1; G404-1; G404-2; G405-1; G408-1; G409-1	S1.1; S1.2; S1.6; S1.3; S2.1; S2.2; S2.4	
6.2 Employee Compensation and Benefits	G201-3; G401-2; G2-20; G406-1	S1.7; S1.10	
6.3 Employee Health and Safety	G403-1; G403-2; G403-3; G403-4; G403-5; G403-6	S3.1; S3.2; S3.4; S3.5; S3.6; S3.7; S3.8; S3.9; S3.10	 
6.4 Community Communication and Public Welfare	G203-1; G413-1	V3.1; V3.3; V3.4; V3.6; V3.7	
Index of Indicators	G204-1; G302-2	A4	
Performance	G201-1; G403-9; G403-10; G404-3; G405-2; G414-1; G414-2	G3.9; G3.10; E1.3; S1.4; S1.5; S1.8; S1.11; S2.3; S3.3; S3.11; S3.12; S5.3; S5.7; V3.2; A2	
Independent Assurance Opinion Statement		A3	
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## Independent Assurance and Statement of Opinion

InFaith Group (here in after referred to as "InFaith"), as entrusted by Yunnan Tin Co., Ltd. (hereinafter referred to as "Yunnan Ti"), has conducted independent limited assurance of the environmental, social and governance information and data disclosed in 2023 Environmental, Social, and Governance (ESG) Report of Yunnan Tin Co., Ltd. (hereinafter referred to as the Report), and disclosed the assurance result and conclusion to readers of the Report in the form of independent assurance and statement of opinion.

### Independence and Capability

1. All the assurance team members of InFaith have no business relationship with Yunnan Tin that leads to conflicts of interest. The team of InFaith has performed this assurance work independently.
2. The assurance team of InFaith consists of experienced professionals in the industry. Relevant persons have received professional training on the GRI Standards issued by the Global Reporting Initiative, AA1000AS v3, ISO 14001, ISO 26000, SA 8000, EcoVadis global supply chain rating and other sustainability-related standards and have adequate understanding and practical experience in relevant international principles, evaluation systems and assurance standards.

### Assurance Statement

1. Yunnan Tin management shall be fully held accountable for the preparation and content of the Report. It is the responsibility of InFaith to conduct an assurance based on the scope as described herein, and to provide professional assurance opinions to the Report readers and stakeholders.
2. Based on the assurance scope limits, InFaith shall, in accordance with AA1000AS v3, conduct independent limited assurance and guarantee conclusion for the matters within the scope defined in the Report. In addition to providing independent assurance and making other statements of opinion on the facts of assurance under the conclusion, InFaith will not assume any legal or other liabilities for any inquiries for any other purposes, or for any other persons who read this Independent Assurance and Statement of Opinion.
3. If you have any questions about the contents contained herein or related matters, Yunnan Tin will reply in a lump sum.
4. In the event of any conflict or inconsistency between the Chinese version and the English version of this Independent Assurance and Statement of Opinion, the Chinese version shall prevail.

### Assurance Standard

InFaith adopts AA1000AS v3 type-2 medium assurance level, which includes Yunnan Tin's evaluation of the compliance situation and degree of the four AA1000AS v3 assurance principles, including inclusiveness, substantiality, responsiveness and impact.

### Assurance Scope

1. The assurance scope is limited to the information and data of Yunnan Tin and its affiliated companies covered by the Report, excluding the data and information of Yunnan Tin suppliers, contractors and other third parties.
2. InFaith adopts AA1000AS v3 type-2 medium assurance level to evaluate Yunnan Tin's compliance nature and degree of the four assurance principles in AA1000AS v3.
3. Yunnan Tin and InFaith have reached an agreement to select specific performance information in the Report as part of the assurance contents. The selected specific performance indicators are as follows:
  - Total emissions of exhaust gases · Total discharge of wastewater · Total employee count · Customer satisfaction rate
  - Average duration of employee training · Total investment in employee training · Lost working hour rate per million working hours

### Assurance Process and Work

In order to gather evidence relevant to the formation of the conclusion, InFaith has done the following work:

1. Had interviews with the management team and employees of Yunnan Tin, to understand the overall situation and relevant processes of the fulfillment of its environmental, social and governance responsibilities.
2. Verified key developments and policy implementation of the relevant Yunnan Tin's organizations and reviewed supporting evidence for the claims made in the Report.

3. Through the interviews and the assurance of relevant documents, learned about Yunnan Tin's main stakeholders and their expectations and demands, the specific communication channels between both parties, and how Yunnan Tin responds to their expectations and demands.
4. Selected the relevant part of environmental, social and governance information in this Report, performed analytical assurance procedures for such information, confirmed the overall performance situation, and evaluated and verified whether the contents of the Report are complied with.
5. Verified the process management of the principles of inclusiveness, substantiality, responsiveness and impact in the Report and its related AA1000 to confirm the appropriateness of this Statement.
6. Sampled inspection on supporting evidence of data reliability and quality of selected specific performance information.
7. Recalculated and verified the selected specific performance information.
8. Performed other procedures that we deemed necessary.

### Assurance Conclusions

1. According to the information provided by Yunnan Tin and the sample test, there is no material misrepresentation in the Report.
2. For the principles of inclusiveness, substantiality, responsiveness and impact included in AA1000AS v3, the detailed assurance conclusions are as follows:

Inclusiveness	Yunnan Tin has announced major topics that will have substantial influence and impact on the evaluation, decision-making, actions and performance of the organization and its stakeholders, and judged and improved the management and performance of the issues.
Substantiality	Yunnan Tin has implemented relevant policies, and is able to respond to issues that concern the stakeholders in a timely manner.
Responsiveness	Yunnan Tin has implemented relevant policies, and is able to respond to issues that concern the stakeholders in a timely manner.
Impact	Yunnan Tin has the adequate ability to identify substantive issues. It has implemented balanced and effective evaluation and disclosure methods, and has established a systematic process for monitoring, measurement, evaluation and management impact, so as to achieve more efficient management of decision-making and results within the organization, and demonstrate the impact of the substantive issues in an impartial and objective manner.

3. Based on the procedures implemented and the evidence obtained by InFaith, we have found nothing that causes us to doubt the reliability and quality of the specific performance indicators selected in the Report.

### Limitation

The assurance process was carried out at the location within the scope of the Report. Because there is no internationally recognized and commonly used standard for the evaluation and measurement of non-financial information, the application of different but acceptable information and measurement technologies may affect the comparability with other institutions.

If you have any advice for this Independent Assurance and Statement of Opinion, you may contact:

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InFaith Group

Shanghai, April 2024





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