



China Minmetals Corporation 2025 Sustainability Report

SUSTAINABILITY REPORT 2025

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You may also read the PDF version of the Report in Chinese and English as well as
the dynamic information related to CSR activities of the Corporation under
"Sustainability" on the homepage of the China Minmetals' official website.

Official website: <https://www.minmetals.com/english/>



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About This Report

Reporting Period

This report covers the period from January 1 to December 31, 2025, and some parts may also involve significant years in the Corporation history.

Publication Cycle

The Corporation publishes sustainability reports annually and this report is the 19th since 2007.

Reporting Scope

This report covers the information of the headquarters and subsidiaries of China Minmetals Corporation. Given the varied business attributes of subsidiaries, there will be slight differences in the boundary and scope of specific topics and explanations will be provided in corresponding paragraphs of this report.

Name Description

For readability, China Minmetals Corporation is referred to as "China Minmetals", "the Corporation", "the Company" and "we".

Reference Standards

- *Guiding Opinions of the State-owned Assets Supervision and Administration Commission of the State Council on High-standard Fulfillment of Social Responsibilities* by Central Enterprises in the New Era
- Global Sustainability Standards Board (GSSB), “*GRI Sustainability Reporting Standards* (GRI Standards 2021)”
- *The Corporate Sustainability Disclosure Standards – Basic Standard (Trial)* issued by the Ministry of Finance and eight other departments
- ISO 26000:2010 – *Guidance on Social Responsibility* issued by the International Organization for Standardization (ISO)
- Chinese Academy of Social Sciences, *Guidelines for Corporate Social Responsibility Reporting in China* (CASS-CSR 4.0)
- *China Sustainable Development Report Guidelines for Chinese Enterprises* (CASS-ESG 6.0) issued by CERDS and CSR Institute
- United Nations 2030 Sustainable Development Goals (SDGs)

Data Statement

All data contained herein are from the Corporation's official documents, statistics reports and financial statements as well as its sustainability practice information collected by sustainability information management system of the Corporation and reviewed by the functional divisions and subsidiaries.

Report Availability

This report is available in both Chinese and English. Please contact us for a hard copy. You may also find the PDF version of this report in both languages as well as the updates related to CSR activities of the Corporation under "Sustainability" on the homepage of China Minmetals' official website.

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Statement

The *China Minmetals Sustainability Report 2025* is to disclose the Company's activities and performance in value creation, innovation, health and safety, environmental protection, employee growth, partnership and social harmony. In this report, China Minmetals regards stakeholders as the most important resource for the Company's sustainable development. We strive to disclose our responsibility fulfillment practices and performance to stakeholders in a detailed and objective manner, and to achieve equal, comprehensive, and in-depth communication with them to the greatest extent possible. Through these efforts, we aim to enhance mutual trust and cooperation with stakeholders and achieve common progress and development.

This report has been rated by the rating panel of the Chinese Expert Committee on CSR Report Rating. The rating report is attached hereto as an appendix.



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Message from the Chairman

The year 2025 marked the final year of the 14th Five-Year Plan period and the 75th anniversary of China Minmetals. China Minmetals made coordinated efforts to ensure stable growth, strengthen industry, advance innovation, promote reform, prevent risks, ensure safety, bringing the 14th Five-Year Plan period to a successful conclusion.

Over the past year, we stimulated innovation momentum and drove higher-end transformation and upgrading. We advanced the “five priorities” initiative in a coordinated manner, focused on building a four-level coordinated sci-tech work management system, and integrated the resources of 19 research and design institutes and 48 national sci-tech platforms to concentrate our strengths on key breakthroughs. In 2025, the Company added 3,514 valid invention patents, representing a year-on-year increase of 23.86%. Four achievements passed the preliminary evaluation for national sci-tech awards, and four achievements won China Patent Awards. To meet urgent national strategic needs and address industry pain points, we achieved major breakthroughs in a number of critical and core technologies. We established China’s first quantum prospecting research institute and built an integrated spaceborne-airborne-ground-downhole three-dimensional exploration system. We successfully developed deep-sea mining equipment with the world’s largest designed production capacity. From high-purity metals to high-end natural graphite and high-end silicon-based materials, we made continuous breakthroughs in a series of industrialized technologies, contributing solid Minmetals strength and providing robust Minmetals solutions for the security and stability of China’s industrial and supply chains and for the high-quality and sustainable development of the industry.

Over the past year, we strengthened and optimized our primary business, improving the quality and efficiency of industrial development. We resolutely implemented the resource-first strategy and accelerated efforts to refocus on core businesses, realign industries, and concentrate resources. From the joint establishment of China Salt Lake Industrial Group Co., Ltd. to the successful bid for the Liaoning Huahonggou Iron Mine project; from Las Bambas Copper Mine further consolidating its position among the

world’s leading copper mines to the full completion of the 40,000 + 20,000 + 15,000-ton lithium carbonate projects, with production capacity ranking among the global top five; and from the full launch of the Khoemacau Expansion Project to the all-out advancement of the Chentaigou Iron Mine Project, our footprint has extended across mountains and seas. The resource reserves and output of multiple metal and mineral products now rank among the top tier in China and globally, and our market influence, and industrial competitiveness have been significantly enhanced.

Over the past year, we upheld development as our priority and made corporate governance more robust. We focused on building a governance system featuring statutorily defined powers, procedural compliance, legitimate content, and robust oversight, steadily advanced the reform of headquarters institutions, deepened penetrating supervision, and implemented differentiated and targeted authorization and delegation, thereby steadily improving our modern governance capabilities. We successfully completed all tasks under the initiative to deepen and upgrade SOE reform and the action to benchmark against world-class enterprises for value creation, achieving a high-quality conclusion. We received an A rating in the annual performance assessment of central SOE executives for the fifth consecutive year and an A rating in the central SOE reform assessment for the fourth consecutive year. The Company now has 16 national manufacturing single-item champions and 25 national-level specialized and sophisticated “little giant” enterprises.

Over the past year, we protected lucid waters and lush mountains and made our safety and environmental foundation more sustainable. We further advanced the three-year campaign to tackle root causes of work safety risks, systematically launched the “Thunder Action” safety inspection campaign, and built a five-in-one safety culture system. No major or more serious work safety incidents occurred throughout the year, and our work safety performance assessment ranked among the best central SOEs in the first category of risk. We coordinated efforts to decarbonize, mitigate pollution, expand green transition, and promote growth. We incorporated carbon peaking and carbon neutrality

into the overall framework of corporate development, established and improved the assessment and evaluation mechanism for carbon peaking and carbon neutrality, and advanced green transformation in an orderly manner. The case of Minmetals New Energy Materials’ recycling of used power batteries was selected as one of the Top 10 Green and Low-carbon Supply Chain Development Cases among Central SOEs and was released and presented at the China Pavilion of the 30th United Nations Climate Change Conference. This vividly demonstrated our commitment to the principle that lucid waters and lush mountains are invaluable assets.

Over the past year, we remained people-oriented and built a more caring and supportive workplace. We strengthened top-level design and institutional development for talent work, and focused on building a talent development system with the characteristics of a central SOE, the features of the industry, and the distinctive qualities of China Minmetals. Solid progress was made in building a high-caliber, professional leadership team, deepening the strategy of strengthening the enterprise through talent, modernizing the human resources system, and promoting reform of income distribution. We further advanced the reform of the industrial workforce and vigorously promoted the model worker spirit, labor spirit, and craftsmanship spirit. Eight employees were named National Model Workers, a record high for the Company, and two employees were recognized as master craftsmen of the nation. We also organized a wide range of cultural and sports activities to enrich employees’ lives outside work, enhance their satisfaction and sense of belonging, and build a career community in which the Company and its employees advance together with shared well-being.

Over the past year, we pursued shared progress through coordinated efforts, working together toward a better future. We actively engaged in public welfare, brought together forces for good, and took the initiative to participate in rural vitalization, emergency rescue and disaster relief, community development, and other initiatives. Focusing on the five key aspects of rural vitalization, we carried out assistance work, directly allocating

CNY 63.7325 million in assistance funds and completing CNY 137 million in consumption-driven assistance, a year-on-year increase of 100%. We donated CNY 10 million to support earthquake relief in Tibet, donated HKD 10 million to support post-disaster reconstruction in Hong Kong, and dispatched elite teams to assist with flash flood rescue operations in Yuzhong, Gansu. An affiliated enterprise was awarded the title of “Outstanding Central SOE Collective during Flood and Typhoon Prevention in 2025.” As a practitioner of the “going global” strategy and the Belt and Road Initiative, we advanced international cooperation in an orderly manner, respected local cultures, policies, and laws, and supported local social development. At the Las Bambas Mine, we advanced the implementation of the “Heart of Bambas” as a systematic livelihood project, investing approximately USD 50.6 million throughout the year in key areas such as poverty reduction, education, and capacity building. The project was selected among the sixth Global Best Poverty Reduction Cases, and Las Bambas topped the list of the most attractive mining companies for talent in Peru.

“Those who start with determination must plan for completion; those who succeed make plans from the beginning.” The year 2026 marks the first year of the 15th Five-Year Plan period. It will be a critical year for China Minmetals to stay focused on its founding mission, shoulder its core responsibilities. We will better support high-quality economic and social development, contribute to safeguarding and improving people’s well-being, and demonstrate new achievements and new responsibilities.

Chairman of the Board

Chen Dexin



About Us

Company Profile

Established in 1950, China Minmetals Corporation (hereinafter referred to as “China Minmetals”) is an important state-owned backbone enterprise with metals and minerals as its core business, and a pilot state-owned capital investment company. China Minmetals gives full play to the three roles of central SOEs in sci-tech innovation, industrial control, and safety support, and strives to become a front-runner in these three respects. It is accelerating the development of a world-class enterprise group with global competitiveness in the metal and mining industry, to better support high-quality economic and social development, and advance efforts to safeguard and improve people’s well-being.

China Minmetals has taken the lead globally in forming full value-chain advantages integrating resource exploration, design and construction, development and operation, smelting and processing, trade and logistics, sci-tech R&D, and financial capital. Its business covers metals and minerals, metallurgical construction, technology industries, trade and logistics, finance and real estate, and other fields. With 180,000 employees, the Company operates in more than 60 countries and regions worldwide. In 2025, the Company recorded total assets of CNY 1.5 trillion, operating revenue of CNY 748.5 billion, total taxes paid of CNY 26.6 billion, and total profit of CNY 24.8 billion. It ranked 86th on the Fortune Global 500 list, marking its 19th consecutive year on the list.

In 2025

total assets of CNY
1.5 trillion

operating revenue of CNY
748.5 billion

total taxes paid of CNY
26.6 billion

total profit of CNY
24.8 billion

China Minmetals owns eight listed companies

Company listed on both the A-share and H-share markets

Metallurgical Corporation of China Limited (MCC) (601618.SH, 1618.HK)

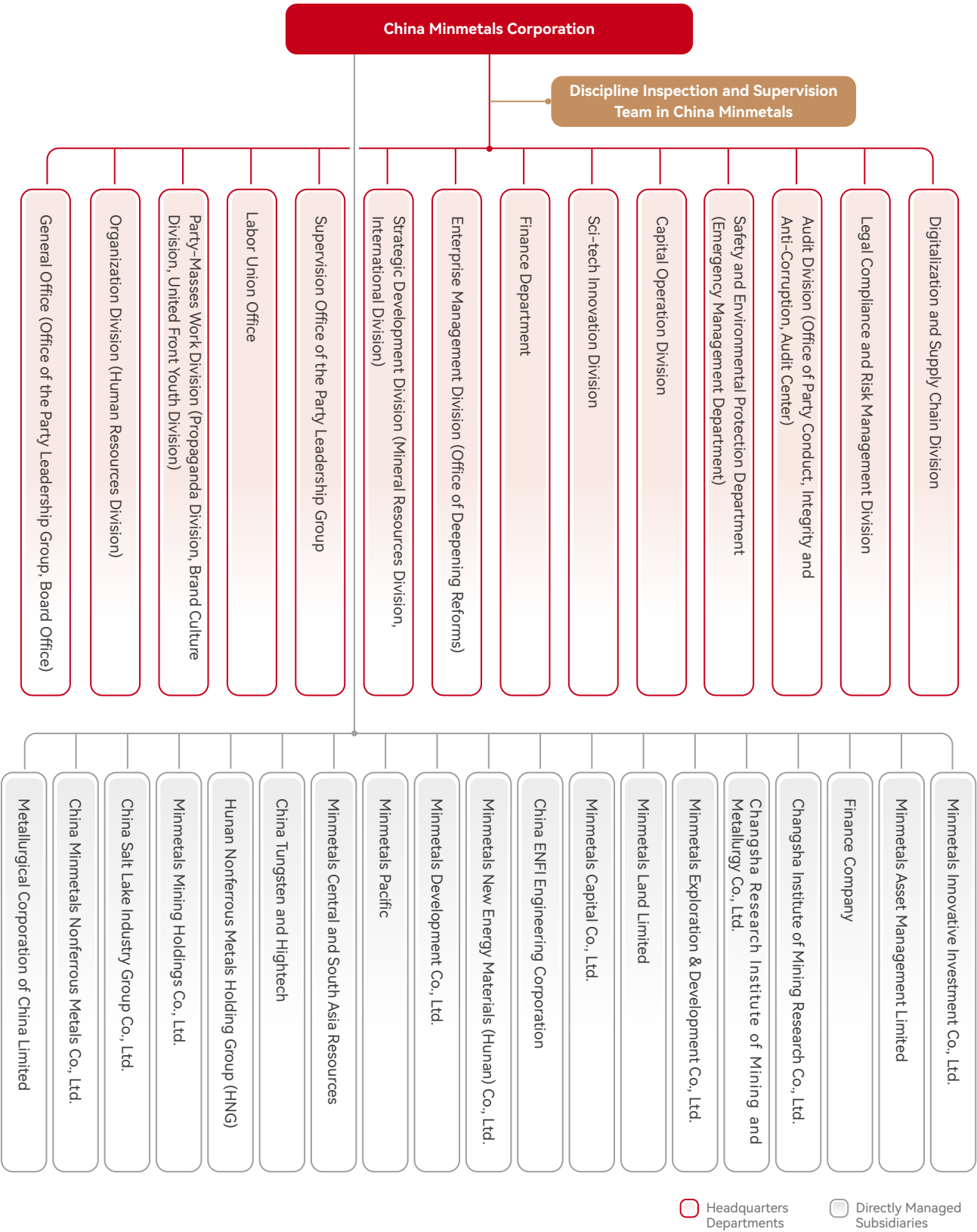
Mainland-listed companies

Salt Lake Industry (000792.SZ)
Zhuzhou Smelter Group (600961.SH)
China Tungsten and Hightech (000657.SZ)
Minmetals Development (600058.SH)
Minmetals New Energy Materials (688779.SH)
Minmetals Capital (600390.SH)

Hong Kong-listed company

Minmetals Resources (1208.HK)

Organization Structure



Corporate Culture

China Minmetals remains committed to empowering sustainable development through corporate culture building. The Company developed a new corporate culture philosophy system and systematically built a framework consisting of “three core elements and nine focus areas of corporate culture.” It distributed and communicated the *Corporate Culture Handbook* across the entire system, organized more than 1,000 tailored communication sessions among enterprises at all levels, and further promoted the content through its owned media platforms, covering more than 30,000 employees offline and reaching nearly 100,000 people online. With its systematic corporate culture practices and notable results, China Minmetals received the highest rating of “5A Enterprise for Corporate Culture Building and Management” in the selection of corporate culture innovation achievements during the 14th Five-Year Plan period organized by the China Corporate Culture Institute.

organized
more than **1,000**
tailored communication sessions
among enterprises at all levels
covering more than
30,000
employees offline

Core Corporate Culture



Founding Mission

Contribute to human progress through developing the mining industry



Strategic Vision

Become a world-class enterprise with global competitiveness in the metal and mining industry



Action Guidelines, Value Orientation, Corporate Spirit

Uphold world-class standards
Lead with independent innovation
Adopt a problem-oriented approach
Pursue excellence with unwavering determination
Fight with a desire for victory

Focus Areas of Corporate Culture



Innovation Culture
Lead the future through innovation-driven progress



Safety Culture
Prioritize life; safety above all



Talent Culture
Value both virtue and competence, unlock the full potential of every employee



Operation Culture
Create value and build win-win partnerships



Green Culture
Green development for harmonious co-existence



Risk Control Culture
Stay vigilant and plan ahead



Rule of Law Culture
Govern the enterprise by law and operate in compliance



Quality Culture
Value craftsmanship and pursue excellence



Integrity Culture
Uphold integrity and safeguard the bottom line

Brand Building

China Minmetals regards brand building as a key lever for high-quality development. It has systematically advanced brand management and achieved progress across multiple dimensions, including strategy optimization, carrier upgrading, and management standardization. In

2025, the Company issued the annual work plan for its brand strategy planning and the guidelines for sub-brand development, optimized and upgraded its brand management information system, and launched a new corporate promotional video and brochure. It also

actively participated in major exhibitions and forums, including the Qinghai Green Development Investment and Trade Fair and the ESG China Innovation Annual Conference, and continued to carry out external brand evaluation and communication, steadily enhancing brand awareness, reputation, and influence.



Brand Strategic Goals

By the end of 2030, the final year of the 15th Five-Year Plan period, China Minmetals aims to basically enter the first tier of global mining brands.

By the end of 2035, China Minmetals aims to fully build itself into a world-class mining brand and become an international brand benchmark.



Decoding the Core of China Minmetals' Brand Strategy

Honorary Awards

86th
On the *Fortune* Global 500 list

Received an **A** rating in the annual performance assessment of central SOE executives for the fifth consecutive year

Rated **A** in the SOE reform assessment organized by SASAC for the fourth consecutive year

Won **26** Metallurgical Science and Technology Awards in 2025

Won **4** awards at the 25th China Patent Awards

8 employees were named National Model Workers, a record high for the Company

2 employees were recognized as master craftsmen of the nation

Rated **A** in the 2025 Benchmarking Assessment of Procurement and Supply Chain Management for Central SOEs organized by SASAC

Selected as an **outstanding practice organization** in the *2025 ESG Excellent Practices Report* released by the Financial Program Center of the China Media Group

Sustainable Development Management

Responsibility Governance



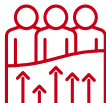
Organizational Structure

The Party Group of China Minmetals serves as the highest leadership body for sustainability and oversees CSR work in a coordinated manner. The Company has established the Brand and Social Responsibility Leading Group as the leadership body for CSR work. The Party-Masses Work Division serves as the lead department for CSR work, under which the Brand Culture Office (Social Responsibility Office) acts as the competent office. All headquarters departments are responsible for sustainability work within their respective business areas according to their functional mandates. All directly managed subsidiaries actively advance sustainability practices to ensure the regular implementation of CSR work.



Institutional Mechanism

The Company has formulated the *Guidelines on Social Responsibility and ESG Work of China Minmetals Corporation* as a dedicated policy document, providing clear direction and guidance for sustainability work. Sustainability has also been incorporated into the Company's long-term planning, and CSR has been integrated into the entire process of operation and management.



Capacity Building

The Company has continued to strengthen sustainability capacity building. It has led and actively participated in major research projects organized by SASAC, including the *Study on Overseas ESG Work of Central SOEs in the Mining Sector* and the *Study on Overseas ESG Work of Central SOEs in the Construction Sector*. It has also actively participated in CSR exchange and sharing activities organized by SASAC, other competent authorities, and mainstream media, where it shared its experience in responsibility fulfillment. In addition, the Company has taken part in specialized CSR training to learn from advanced CSR management practices and continuously improve its CSR management capability and overall performance.

Responsibility Topics

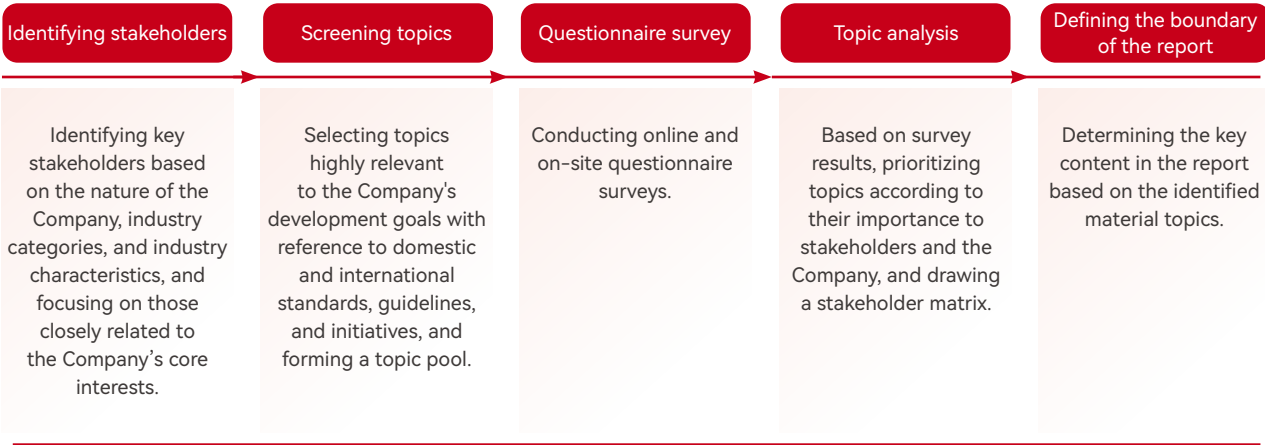
Sustainability Context Analysis

Area	Risks and Opportunities
Environment	• Addressing Climate Change: Climate change is a key force reshaping industry rules. China Minmetals faces transition risks such as rising carbon emission costs and stranded high-carbon assets. At the same time, it also has opportunities to lead green transformation, develop the circular economy and low-carbon technologies, strengthen its position in the new energy metals market, and expand into new businesses such as carbon trading.
	• Ecological Environment Protection: Strong ecological and environmental performance is an important foundation for long-term corporate development. Pollution prevention and control is a binding requirement that enterprises must strictly observe. Environmental incidents may result in legal sanctions, operational disruptions, and reputational damage. By adopting advanced cleaner production technologies, the Company can turn environmental pressure into a driver of technological upgrading and cost savings. Through technological and management innovation, including green mine construction and ecological restoration, the Company can reduce environmental risks and compliance costs while setting a green benchmark for the industry.

Area	Risks and Opportunities
Environment	• Energy Use: Energy efficiency has a direct impact on costs and carbon emissions. Inefficient and less refined energy use may increase production and operating costs and add pressure on emissions reduction. Through measures such as refined management, energy-saving upgrades, and the substitution of renewable energy, the Company can reduce energy consumption and costs while promoting green transformation.
	• Green Technology Innovation: Green technology innovation is a strategic engine for addressing environmental constraints and gaining future competitiveness. By focusing on breakthroughs in cleaner production, resource recycling, and related fields, the Company can develop competitive green products and solutions and open up new growth areas.
	• Water Resource Management: High water consumption and improper wastewater treatment may intensify water stress and trigger community conflicts. By implementing a full-process strategy for water recycling and intensive use, and investing in water-saving processes and wastewater reuse technologies, the Company can ensure operational stability and reduce costs.
Society	• Tailings Pond Management: Tailings ponds are areas where environmental and safety risks are concentrated. Through standardized, intelligent, and ecological governance, the Company can control major risks, secure its social license to operate, and demonstrate its operational capability and social responsibility.
	• Sci-tech Innovation: Sci-tech innovation is a core engine for driving industrial upgrading and safeguarding supply chain security. Technological leadership brings competitiveness, while R&D requires large investment and long cycles. Breakthroughs in critical and core technologies can help solve critical tech bottlenecks and open up new growth areas such as new energy and high-end materials.
	• Product Quality and Safety: Product quality and safety are the foundation for an enterprise's survival and development. Major quality or safety incidents may damage reputation and result in market loss. By establishing a management system that exceeds industry standards, the Company can build brand trust and obtain a "passport" to high-end supply chains.
	• Protection of Employee Rights and Interests: Employees are the most valuable asset of an enterprise. Labor disputes, work-related injuries, or talent loss may disrupt production continuity and increase costs. By building competitive compensation, development, and health systems, the Company can retain core talent and improve productivity and innovation vitality.
	• Occupational Health and Safety of Employees: Occupational health damage or safety incidents may cause casualties, production disruptions, and reputational damage, and may also lead to regulatory penalties. By improving the management system, fostering a safety culture and upgrading safety facilities, the Company can reduce accident rates and costs while enhancing employees' sense of belonging and work efficiency.
	• Employee Training and Development: Employee training and development provide the talent foundation for implementing corporate strategies. By building a learning organization and career development pathways, the Company can increase talent density, accelerate technology inheritance and innovation, and provide talent support for transformation and upgrading.
	• Customer Rights and Privacy Protection: Customer data has become a core asset. By turning privacy protection into a service advantage through high-level data security certification and transparent communication, the Company can enhance customer loyalty and trust and build a trust barrier in digital competition.

Area	Risks and Opportunities
Society	• Digital Transformation: Digital transformation is an essential path for improving efficiency, enabling intelligent decision-making, and ensuring work safety. It can reduce costs, improve efficiency, optimize resources, and enable remote intelligent control, helping the Company build new advantages in smart mines, intelligent manufacturing, and other fields while fostering new data-driven models.
	• Community Engagement and Development: Harmonious community relations are an important guarantee for the smooth implementation of projects. Neglecting community interests may lead to conflicts, project delays, and reputational risks. Through deep engagement in infrastructure development, local employment, and public welfare projects, the Company can build a long-term social support network and lay a social foundation for business expansion.
	• Rural Vitalization: Participation in rural vitalization demonstrates central SOEs’ commitment to fulfilling their social responsibilities. Through diversified assistance in industry, consumption, talent, and other areas, the Company can promote coordinated regional development, expand resource channels and potential markets, and strengthen strategic cooperation with local governments.
	• Indigenous peoples’ Rights / Community Relations Management: In overseas operations and ethnic minority areas, respecting indigenous peoples’ rights and maintaining harmonious community relations are key to project legitimacy and sustainability. Through social impact assessments and benefit-sharing mechanisms, the Company can turn communities into supporters and reduce operational resistance.
Governance	• Responsible Supply Chains: Supply chain sustainability and resilience are closely related to production stability and corporate reputation. Environmental, labor, and other issues among suppliers may be transmitted along the chain, resulting in business disruptions and brand damage. By building a responsible supply chain management system, the Company can improve chain efficiency and stability and meet downstream customers’ ESG audit requirements.
	• Corporate Governance: Excellent corporate governance is the foundation for long-term success. Governance failures may lead to strategic mistakes, internal control loopholes, and corruption. By establishing a governance system with clearly defined rights and responsibilities, standardized operations, transparency, and efficiency, the Company can improve decision-making quality, prevent risks, and enhance investor confidence.
	• Compliance and Risk Management: Global operations face complex legal, trade, and geopolitical environments. Non-compliance may lead to fines, accountability, and market access restrictions. Building a first-class compliance and risk control system can safeguard global operations, provide a credibility guarantee for international cooperation, and enhance resilience in multinational operations.
	• Intellectual Property Protection: Under innovation-driven development, intellectual property is the legal carrier of core competitiveness. By building a systematic intellectual property management system, the Company can protect innovation outcomes and realize their commercial value through patent licensing and participation in the formulation of technical standards.
	• Anti-unfair Competition Practices: Upholding the principle of fair competition is the bottom line for lawful and compliant business operations. Establishing and communicating a code of business conduct that complies with basic legal requirements can lay a more solid foundation for long-term competition.
	• Anti-corruption and Anti-commercial Bribery: Corruption and commercial bribery may directly lead to severe legal sanctions, substantial fines, and management accountability. By building and strictly implementing a compliant and transparent integrity governance system, the Company can foster a fair and trustworthy business image and win the long-term trust of governments, investors, and strategic partners.

Material topics identification process



Materiality Matrix



Responsibility Communication

Responsibility Reports

China Minmetals communicates with stakeholders through diverse channels, including sustainability reports, the official website, WeChat account, and mainstream media. The Company has established a three-dimensional “1+N+M” sustainability reporting model comprising China Minmetals group-level reports, subsidiary reports, and key country-specific reports. The headquarters has issued 19 consecutive sustainability reports. The Company actively encourages qualified subsidiaries to publish independent ESG reports and prepares country-specific responsibility fulfillment reports for key countries, presenting to stakeholders a comprehensive picture of its efforts and achievements in environmental, social, and governance areas.



China Minmetals Sustainability Report 2024



MCC 2024 Environmental, Social and Governance and Sustainability Report



China Minmetals Sustainability Report in Peru

Report Preparation Process



Stakeholder Engagement

		Expectations and Requirements	Communication and Response Methods
	Shareholders / Regulatory Authorities	• Operational compliance • Satisfactory market value • Work safety • Green development • Brand enhancement	• Special reports • Improving profitability • Safety management • Energy conservation and emission reduction • Brand building
	Local Governments	• Tax payment according to laws • Job creation • Economic development	• Voluntary tax payment • Project support • Driving local economic growth
	Customers	• Honor commitments in good faith • High-quality products • High-quality services	• Contract performance • Improving product quality • Enhancing service capabilities
	Employees	• Equal opportunities • Career development • Occupational health • Employee care	• Democratic communication • Education and training • Provision of protective equipment, facilities, and labor protection supplies • Employee well-being
	Partners	• Compliance with business ethics • Fair and open procurement • Mutual benefits and win-win results • Shared development	• Transparent procurement information • Negotiation and communication
	Communities	• Improving the community environment • Respecting community culture • Supporting public welfare initiatives	• Participating in community development • Protection of indigenous cultures • Charitable initiatives
	Environment	• Protecting ecological environment • Addressing climate change	• Promoting green production • Practicing green operations

Strengthening Our Mining Backbone over 75 Years and Advancing into the 15th Five-Year Plan Period as a Pillar of National Strategic Capability

Over the 75 years since its establishment, China Minmetals has witnessed and participated in the magnificent course of China's economic development. With unwavering determination to forge ahead and a steadfast commitment to the mining industry, China Minmetals has gone through three historic stages, achieved remarkable progress in seven areas, and written a magnificent chapter worthy of history, the times, and the people.

A Glorious Journey China Minmetals' Historical Evolution and Advances across Eras

The 75-year history of China Minmetals is a history of integrating its own development into the broader course of national development. Its development path can be clearly divided into three major stages with distinct features of the times.

From Establishment to the Period before Reform and Opening Up (1950–1978): Born and Developed in Response to the Call of a Historic Mission

In the early days of New China, when national reconstruction was just beginning and supplies remained scarce, China Minmetals emerged as a professional trading company. In the face of blockades and embargoes imposed by Western countries, generations of China Minmetals employees upheld the spirit of self-reliance and hard work, shouldered responsibilities with courage, and took proactive action. With perseverance, courage, and wisdom, they opened up trade channels amid numerous difficulties. China Minmetals became a core hub for New China's imports and exports of metal and mineral products, hardware products, and building materials. It not only strongly supported the material needs of domestic industrial development, but also made important contributions to breaking external economic blockades and promoting international exchanges and cooperation. During that special period in history, China Minmetals built a solid supply line for national economic development.



Former Office Site of China Minerals Company — No. 36 Baochan Hutong

After Reform and Opening Up (1978–2012): Transformation amid the Tide of Reform and Opening Up

China Minmetals took the lead with courage and initiative. As one of the earliest Chinese enterprises to “go global,” it actively embraced the market economy and boldly explored a path of diversified and industrial development, continuously expanding its business landscape. Through strategic planning and resource integration, China Minmetals fully engaged in international market competition and gradually achieved a transformation from a single business to diversified operations, and from traditional trade to industrial investment. It began to make its mark in the international metals and minerals sector and initially developed into a metals and minerals enterprise group with broad international influence, accumulating valuable experience for the international development of Chinese enterprises.



In January 1988, Minmetals Corporation held a national managers' meeting in Shenzhen



On May 28, 1997, Minmetals Development rang the bell for its listing on the Shanghai Stock Exchange

Entering the New Era (2012–Present): Advancing toward World-class Development

China Minmetals has remained firmly committed to becoming stronger, better, and larger. It has accelerated strategic transformation characterized by restructuring, mergers, and acquisitions. In the global metals and minerals sector, China Minmetals has taken the lead in building a full value-chain pathway from resource acquisition, prospecting and exploration, design and construction, mining and mineral processing, smelting and processing, to trade and logistics, forming integrated competitive advantages across the full value-chain.

At the same time, China Minmetals has continued to deepen reform, strengthen innovation, enhance its core functions, and improve its core competitiveness. It is playing an increasingly important role in promoting high-quality industry development. In doing so, it continues to inject Minmetals momentum and contribute Minmetals strength to building China into a modern socialist country in all respects and advancing the great rejuvenation of the Chinese nation.

Since 2014, China Minmetals has successfully acquired a series of major overseas mining assets, including Las Bambas Copper Mine in Peru, then the world's largest copper mine project under construction, and Khoemacau Copper Mine in Botswana, one of Africa's leading producing copper mines. It has also independently designed, built, and operated Dugald River Zinc Mine in Australia, a major zinc mine with output ranking among the global top tier.



Aerial View of Las Bambas Mine

In December 2015, China Minmetals carried out a strategic restructuring with Metallurgical Corporation of China Ltd., another Fortune Global 500 company. This restructuring enabled China Minmetals to take the lead in the global metals and mining sector in building a full value-chain pathway from resource acquisition, prospecting and exploration, design and construction, mining and mineral processing, smelting and processing, to trade and logistics. It also led to a larger business scale, more diversified business operations, and stronger risk resilience.



MCC Building

In February 2025, China Salt Lake Industry Group Co., Ltd., jointly established by China Minmetals and Qinghai Province, was officially inaugurated. China Minmetals has taken on the responsibility of accelerating the development of a world-class salt lake industrial base. This marked another important step in its journey to strengthen core functions and enhance core competitiveness.



Qarhan Salt Lake

A Portrait of Progress and Spirit

China Minmetals' Development Achievements and Underlying Ethos

Ensuring Stable Growth Strengthening the Foundation for Development and Serving as a Mainstay

Over the years, China Minmetals has completed a profound transformation in step with the times: from executing planned directives to becoming a modern enterprise with independent operations; from a small courtyard in a hutong to a global presence in more than 60 countries and regions; from a single trading business to a multinational group with full value-chain synergy; and from owning no mines to controlling resources in more than 40 mines at home and abroad. Its operating revenue grew steadily from CNY 385.8 billion during the 10th Five-Year Plan period to CNY 4.26 trillion during the 14th Five-Year Plan period, strongly supporting stable growth of the national economy through solid development.

Today, China Minmetals remains committed to guiding high-quality development with ambitious targets. It has promoted the Amoeba Management Model at all levels, enhanced value creation through accounting-based operations, improved efficiency through refined management, and raised effectiveness through reform and innovation. By steadily implementing all strategic plans and making every effort to complete all tasks, China Minmetals continues to serve as a mainstay, stabilizer, and ballast stone for the steady growth of the national economy.

Amoeba Management Model

The core idea of the Amoeba Management Model is to divide the entire company into many independently accounted and self-managed micro business units known as "amoebas." Each amoeba serves as the smallest independent accounting unit at the frontline. Led by an amoeba leader and composed of amoeba members, each unit sets its own organizational goals. These goals drive in-depth reform of four economic operation and management systems: indicators, pricing, accounting, and assessment. This approach effectively stimulates the internal motivation of front-line managers and employees across operating units, and fully mobilizes the initiative and enthusiasm of all employees.

Over the past 75 years, China Minmetals has strengthened its foundation while ensuring stable growth, unleashed development momentum through innovation, deepened its advantages by strengthening industry, released vitality through reform, advanced steadily by preventing risks, and upheld the bottom line by ensuring safety. Through hard work and a strong sense of responsibility, China Minmetals has written a remarkable history.

Advancing Innovation Unleashing Development Momentum and Scaling New Heights in Science and Technology

China Minmetals has always placed sci-tech innovation at the core of its overall development. Committed to independent innovation, the Company strengthens integrated innovation and application-oriented innovation, tackles critical tech bottlenecks, and continuously translates technological leadership into market-leading benefits.

Today, driven by sci-tech innovation, the Company has achieved systematic breakthroughs across multiple fields. In resource development, it has built a green, low-carbon, and efficient technology system for mineral resource development. In metallurgy, it has advanced non-ferrous and ferrous metallurgy toward intelligent, green, low-carbon, and efficient development. In energy conservation and environmental protection, it has applied key technologies for pollution control and resource recycling. In new materials, it has achieved breakthroughs in a number of high-end material technologies and built a full value-chain layout for power batteries. In basic construction, it has leveraged digital and green transformation to develop many distinctive competitive industries, products, and premium brands. Sci-tech innovation is becoming a powerful engine driving the Company's high-quality development.



Developed the world's first 6,000-meter-class intelligent electric-drive deep-sea heavy-duty mining vehicle



Self-developed High-pressure Acid Leaching Technology for Laterite Nickel Ore Applied at Ramu Nickel-Cobalt Mine

Strengthening Industry Improving the Industrial System and Deepening Development Advantages

From trading to the integration of industry and trade, from supply chain security to industrial chain extension and then to the formation of full value-chain integration advantages, China Minmetals has not only taken the lead globally in building a full value-chain pathway from resource acquisition, prospecting and exploration, design and construction, mining and mineral processing, smelting and processing, to trade and logistics, but has also achieved widely recognized progress across metals and minerals, metallurgical construction, technology industries, trade and logistics, finance and real estate, and other business areas.

In metals and minerals, China Minmetals owns 41 mines at home and abroad, with resource reserves ranking among the global top tier. In metallurgical construction, it has participated in and witnessed the rise and modernization of New China's steel industry. In technology industries, it has deeply embedded innovation into the industrial chain and achieved breakthroughs in a number of key technologies. In trade and logistics, and finance and real estate, it has built a global network and a full-license financial services system. Today, China Minmetals has grown into a strategic pillar for leading industrial transformation and upgrading, and deeply integrating into global industrial and supply chains.

Metals and Minerals



Khoemacau Mine



Shizhuyuan Poly-Metallic Mine

Metallurgical Construction



Baowu Zhanjiang Steel Project



Zhongtian Green Premium Steel Project

Technology Industries



Cemented Carbide Micro-Drill Bits



Ultra-high Purity Graphite Production Line

Trade and Logistics



Terminal of Caofeidian International Ore Trading Center

Financial Assets – Industrial and Urban Services



Montego Bay Project, Hong Kong

More than

30,000 sci-tech personnel

Approximately

66,800 valid patents

Approximately

23,200 valid invention patents

203 State Science and Technology Awards

696 PCT patents

103 China Patent Awards

Approval obtained in July 2024 to lead the construction of **China's first national technology innovation center in the field of mineral resources** — the National Technology Innovation Center for Efficient Development of Strategic Rare Metal Mineral Resources

By the end of 2025

19 restructured research and design institutes

48 national sci-tech R&D platforms

including national key laboratories and national technology innovation centers

more than

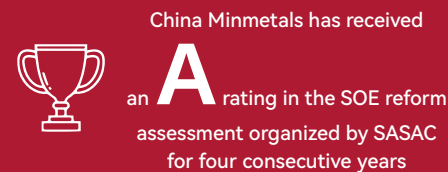
200 provincial- and ministerial-level sci-tech platforms

Promoting Reform Tackling Development Challenges and Releasing Institutional Vitality



China Minmetals has remained committed to the direction of socialist market economic reform and continued to advance reforms in key areas and critical links, successfully becoming a pilot state-owned capital investment company. It has fully implemented the “1+N” policy framework for SOE reform, and carried forward the three-year action plan for SOE reform and the initiative to deepen and upgrade SOE reform in a coordinated and continuous manner, delivering a series of breakthrough progress and landmark results. China Minmetals has received an A rating in the SOE reform assessment organized by SASAC for four consecutive years.

Looking ahead, China Minmetals will continue to deepen standardized management and modern governance, build itself into a more dynamic and efficient market entity, better adapt to the global mining competition landscape, unlock its development potential, and contribute “Minmetals experience” to China’s economic system reform.



Preventing Risks Strengthening the Safety Barrier for Steady Development



China Minmetals has always placed the prevention and resolution of major risks in a prominent position. Upholding bottom-line thinking, the Company has vigorously advanced law-based governance and compliance management. With a prudent approach to investment control, it has targeted risks in overseas operations, key businesses, and other areas, built a full-process risk assessment, judgment, prevention, and control mechanism, and fostered a risk culture among all employees. These efforts have systematically strengthened the safety barrier for corporate development.

At present, the Company is accelerating penetrating supervision at all levels and working to build a more comprehensive and efficient risk prevention and control system. By continuously resolving existing risks, curbing emerging risks, and preventing variable risks, China Minmetals has focused on key challenges related to debt and fund security, responded prudently to various overseas challenges, and firmly upheld the bottom line of preventing systemic risks. These efforts ensure that the Company advances steadily through challenges and provide a solid foundation for its continued role as a mainstay in safeguarding national resource security and supporting economic stability.



Las Bambas Mine Launches Peru's First Integrated Remote Operations Center

Ensuring Safety Upholding the Red Line of Life and Practicing Green Development



China Minmetals has deeply practiced the development philosophy of “putting people and their lives above anything else” and “lucid waters and lush mountains are invaluable assets.” The Company has always regarded safety and environmental protection as the lifeline of high-quality and sustainable development. It enforces safety with ironclad determination, discipline, and measures, and manages environmental protection with strict, detailed, and practical actions. Safety development and green development have been embedded in all fields and throughout the entire process of corporate operations, and the Company’s safety and environmental performance has remained generally stable over the long term.

With a strong sense of responsibility that “no issue is too small to be overlooked,” China Minmetals continues to raise standards and tighten requirements for safety and environmental protection. It makes every effort to ensure that the work safety responsibility system is implemented in depth and in detail, strengthens risk prevention in key areas, and vigorously cultivates a safety culture among all employees. The Company is committed to being an active communicator and model practitioner of the “people and life first” principle and the “Two Mountains” theory.



Fire Evacuation and Escape Emergency Drill Conducted by China MCC22 Group



Group Photo of China Minmetals Leadership Team Members with Honored Model Workers and Outstanding Young Employee Representatives

Writing a New Chapter of Rural Vitalization for Harmonious and Beautiful Countryside

Agricultural and rural modernization bears on the overall progress and quality of Chinese modernization. The year 2025 marked the final year of the five-year transition period for consolidating and expanding achievements in poverty alleviation and integrating them with rural vitalization. Following the principles of “targeted, distinctive, and long-term” assistance, China Minmetals continued to increase resource input, innovate assistance measures, and advance assistance work in an orderly and solid manner across six paired assistance counties and one counterpart support county.



Six Paired Assistance Counties

Zhenxiong County, Yunnan Province

Huayuan County, Hunan Province

Yiliang County, Yunnan Province

Dejiang County, Guizhou Province

Weixin County, Yunnan Province

Yanhe County, Guizhou Province

One Counterpart Support County

Qilian County, Qinghai Province



Received the highest rating of “Excellent” in the central units’ paired assistance assessment for

7 consecutive years

Direct funding in the seven counties: CNY

63.7325 million

in grant assistance funds

and CNY

44.0616 million

in repayable assistance funds

Introduced assistance funds: CNY

13.3517 million

in grant assistance funds, up

150 % year on year

CNY

140 million

in repayable assistance funds, up

300 % year on year

Consumption-driven assistance: CNY

137 million

up

100 % year on year

Strengthening Organizational Leadership and Systems Support to Build Synergy

China Minmetals has always promoted assistance work from a high level and continuously strengthened organizational leadership. Through a series of measures, including convening special meetings, issuing work plans, conducting research visits and interviews, carrying out supervision and inspection, and strengthening the training of assistance officials, the Company has ensured that assistance work is implemented in detail and with solid results. The Company selected and dispatched more than ten outstanding officials to temporary posts on the front line, effectively transforming organizational strengths into assistance synergy and providing solid support for the all-around advancement of rural vitalization.

Chen Dexin Visits Dejiang County, Guizhou Province to Research Rural Vitalization and Strengthen Support through Targeted, Long-term Measures



In November 2025, Chen Dexin, Chairman of China Minmetals, led a delegation to Dejiang County, Guizhou Province to research rural vitalization. The delegation visited the tea industry base in Hexing Town, local schools, and the Gastrodia elata processing production line to gain an in-depth understanding of the development of distinctive industries and local income growth. Chen Dexin emphasized the need to thoroughly study and implement the guiding principles of the central authorities, fulfill the responsibilities of a central SOE from a higher position, and adhere to the principles of “targeted, distinctive, and long-term” assistance. He called for a systematic review of assistance experience during the 14th Five-Year Plan period, alignment with Dejiang’s needs for the 15th Five-Year Plan period, and a focus on key areas such as education improvement, skills training, and industrial capacity expansion, so as to enhance the effectiveness of assistance and advance all-around rural vitalization. He also encouraged officials serving temporary posts to carry forward a work style of “taking solid action and delivering practical results,” remain rooted on the front line, and serve the grassroots.



Research Visit by Chen Dexin and His Delegation to the Tea Industry Base in Hexing Town, Dejiang County

Upgrading Models and Empowering Rural Development through Diverse Measures

Focusing on the five key aspects of rural vitalization, China Minmetals takes industrial vitalization as the lead, distinctive empowerment as the approach, talent development as the support, and financial services as the safeguard. The Company has created a number of replicable and scalable demonstration models, continuously broadened channels for income growth, and activated the endogenous momentum of rural areas. Through concrete actions and a strong sense of responsibility, China Minmetals is writing its own chapter in serving national strategies and supporting common prosperity.

Supporting Agriculture through Industrial Development to Unleash Growth Momentum

China Minmetals adapted its measures to local conditions and leveraged its business characteristics and resource strengths to promote a “small yet impactful” industrial assistance model. The model combines central SOE funding, operation by farmers’ cooperatives, income growth for registered low-income households, enterprise procurement and sales support, clear benefit-sharing arrangements, and the cultivation of local endogenous development momentum. From an industrial-chain perspective, China Minmetals helped assisted counties plan and develop rural industries, with a focus on the “one county, one industry” approach. The Company supported the development of distinctive local industries that enrich communities and cultivated a number of high-quality projects, including Yanhe peaches and pears, Huayuan oilseed rice, Zhenxiong silk, Yiliang Ganoderma, Dejiang Gastrodia elata, and Weixin wasabi. Through distinctive industries and long-term mechanisms, these efforts have strengthened the foundation for income growth, activated development momentum, and enabled industrial vitalization to drive all-around rural vitalization. In 2025, SASAC released the *Report on Brand Building by Central SOEs in Supporting Rural Industrial Vitalization*. China Minmetals’ assistance brand “CISDI Yinong” was recognized as a distinctive enterprise brand, and “Sanhuashan” was recognized as a distinctive product brand.

Yanhe County Builds the “Happy Peach and Pear” Smart Agriculture Demonstration Park

Since 2020, China Minmetals has spent six consecutive years developing a smart agriculture demonstration park in Yanhe Tujia Autonomous County, Guizhou Province. Based on the peach and pear agricultural industry, supported by modern ecological planting and breeding circulation technologies, drawing on regional cultural characteristics, and using rural leisure tourism as a breakthrough point, the park has built a 500-mu peach planting base and a 1,500-mu pear planting base. The park holds the Peach and Pear Culture and Tourism Festival every year and organizes on-line sales through the “Adopt a Tree” mini program. It has radiated benefits to 16 villages and communities in Heishui Town, promoted industrial transformation and upgrading, achieved the development goal of “10,000 mu of pear orchards and 1,000 mu of peach orchards,” and generated an average annual output value of more than CNY 2.2 million, strongly supporting industrial development and income growth in Yanhe. In 2025, the case was selected for the *Blue Book on Central SOEs Supporting Rural Vitalization (2024)*.



“Happy Peach and Pear” Agricultural Demonstration Park in Heishui, Guizhou, Supported by China Minmetals

Using Finance as a Link: “Futures + Insurance” Addresses People’s Livelihood Concerns

China Minmetals has empowered rural vitalization through financial innovation and continued to optimize financial service solutions. For nine consecutive years, the Company has carried out distinctive assistance through the “futures + insurance” model, helping farmers and breeders withstand the risks of market price fluctuations. Over the past nine years, this model has benefited 117 counties and districts nationwide, with cumulative claim settlements totaling CNY 137 million. In 2025, China Minmetals carried out 38 projects, benefiting 35 counties and districts nationwide, including China Minmetals’ assisted counties, with a project implementation amount of CNY 708 million.



Claim Settlement Ceremony for the Live Hog and Pig Feed “Insurance + Futures” Project in Huayuan County

A “Fumin Workshop” Turns Mountain Gastrodia into a Valuable Industry

In 2025, China Minmetals, together with the China Foundation for Rural Development (CFRD), implemented the “Fumin Workshop” industrial assistance project in Qianfeng Village, Dejiang County, Guizhou Province. Focusing on the local distinctive Gastrodia elata industry, the project provided donations to help the cooperative build cold storage facilities and upgrade its processing production line, effectively addressing the bottleneck of Gastrodia elata storage and preservation and supporting the industry’s development toward scale and standardization. The project is expected to add several million yuan in annual output value. At the same time, through a “near-home employment” model, the project created stable job opportunities and asset-based income for villagers, achieving the dual goals of enterprise efficiency improvement and farmers’ income growth. It represents a strong practice of “blood-making” industrial assistance and a solid step toward rural common prosperity.



Villagers Sorting and Selecting Gastrodia elata Products

“At our age, being able to work at a Gastrodia elata site near home helps us earn more than CNY 2,000 extra each month. Over a year, that adds a considerable amount of income for the family.”

— A villager from Qianfeng Village participating in the Gastrodia elata industry

Pooling Talent to Strengthen the Development Foundation

In education assistance, China Minmetals has continued to deepen support for both aspirations and capabilities. The Company focuses on addressing hardware shortcomings and promoting more balanced access to resources, helping assisted areas improve school infrastructure. Through brand projects such as the “Mining Center” vocational education program, it promotes the flow of quality educational resources to county-level areas and broadens local students’ pathways for growth and success. By strengthening specialized training for grassroots officials, rural prosperity leaders, and practical sci-tech talent, China Minmetals has laid a solid talent foundation for advancing all-around rural vitalization and accelerating agricultural and rural modernization.

In 2025



4,957

person-times of training for grassroots officials on topics such as investment promotion, industrial development, and financial policies



1,351

person-times of training for rural vitalization leaders on topics such as MSME management, rural tourism development, and online sales of agricultural products



3,889

person-times of training for professional and technical talent in hands-on labor skills, including cooking, embroidery, welding, and fruit tree management

Leveraging Professional Strengths to Build the “Mining Heart” Vocational Education Brand

Relying on Panzhihua Institute of Technicians, China Minmetals has innovatively carried out the “Mining Heart” vocational education assistance project. The project provides three years of free vocational education for selected students from disadvantaged families in seven assisted counties, covers their living expenses, and recommends employment opportunities, opening a window of hope for outstanding students from financially difficult backgrounds who have strong aspirations. In 2025, enrollment expanded to 145 students, setting a new annual record. Among them, Wu Zongshan, a graduate from Yiliang County, won a bronze medal in welding at the Third National Vocational Skills Competition and was selected for the national training team.

Since the launch of the “Mining Heart” project in 2019, it has enrolled a total of 531 students from designated assisted counties. Of these students, 139 have successfully graduated, 19 have been admitted to college, and 120 have entered the workforce.



Daily Training of Wu Zongshan, a Student from Yiliang County

“Love Kitchen” Improves Catering Conditions in Rural School Canteens

“Love Kitchen” is a public welfare initiative jointly launched by the China Foundation for Rural Development and multiple enterprises. It focuses on improving nutrition for children in underdeveloped areas and supporting the healthy growth of students in these regions. In 2025, China Minmetals introduced the “Love Kitchen” public welfare project in Weixin County. Caring enterprises donated 142 sets of kitchen equipment, including double large-pot induction cookers, disinfection cabinets, and storage racks, benefiting eight local schools. From the perspective of logistical support, the project effectively improved meal service efficiency and hygiene standards, enabling children to enjoy more efficient, warm, and healthy catering services at school.



“Love Kitchen” Public Welfare Project Implemented by China Minmetals

“Head Goose” Training Program for Rural Vitalization

In 2025, China Minmetals launched the “Head Goose” Training Program for Rural Vitalization in Qilian County, establishing a training course to improve elderly care and housekeeping service capabilities. More than 50 female trainees from townships, communities, and housekeeping enterprises participated in the program. Over 60% of the trainees were left-behind women or members of low-income households. The training covered professional literacy, advanced elderly care, and hands-on first-aid skills. Trainees who passed the final assessment received a *Certificate of Training Completion*. At the same time, the program launched a “direct employment channel,” using mock interviews and two-way job fairs with enterprises to precisely match outstanding trainees with positions in housekeeping companies and elderly care institutions, creating a closed loop of “training–certification–employment.”

Nurturing Local Culture to Strengthen Rural Bonds

In its rural vitalization work, China Minmetals has consistently adopted targeted measures tailored to local conditions. Building on efforts to protect and carry forward traditional villages, ethnic villages, and folk cultures in assisted counties, the Company has focused on the distinctive local endowments of assisted rural areas. With public infrastructure development as a key lever and rural public cultural services as an important platform, China Minmetals has actively cultivated cultural tourism industries in Huayuan, Yanhe, and other areas, developed distinctive local brands, and transformed local resources into development advantages. These efforts have revitalized traditional rural culture, promoted traditional and ethnic cultures, and helped farmers increase their income and prosperity.

Energizing Rural Tourism through “Donglan” Cave Basketball

Fengming Cave in Heishui Town, Yanhe County, Guizhou Province, is surrounded by mountains and maintains a pleasant year-round temperature of 15–25°C inside. In 2025, China Minmetals further tapped the potential of natural cave resources and invested special assistance funds to creatively transform Fengming Cave into an integrated sports, culture, and tourism space that combines sports events, sightseeing, leisure, and experiential activities. The 2,300-square-meter international-standard basketball court is connected with a landscaped area featuring stalactites and flowstone formations. Supporting facilities include a cave bar lounge, a central viewing hall, and an exploration hall.

In August 2025, the first event after the launch of “Donglan” officially kicked off. Twelve basketball teams from four provinces and municipalities gathered in Heishui, attracting more than 40,000 on-site visits and up to 300 million online views, setting a new record for rural sports. By the end of January 2026, the project had hosted more than 200 events, attracted over 1,000 Chinese and international teams, received more than 400,000 tourist visits, and generated total online topic traffic of over 500 million views. “Donglan” has become a landmark brand symbolizing regional vitality, innovation, and the achievements of rural vitalization. During the events, the venue also staged Tujia cultural performances, allowing visitors to experience local folk customs while watching games. The project directly increased the income of surrounding residents by more than CNY 2 million and promoted the integrated development of sports, tourism, culture, and agriculture.



“Donglan” Cave Basketball Venue in Yanhe

Leveraging Ecology to Build Livable Villages

China Minmetals has studied and applied the experience of the “Green Rural Revival Program,” remained committed to integrating ecological governance with the development of distinctive industries, continuously improved living environments in assisted areas, strengthened rural ecological protection and restoration, and advanced ecological development and rural vitalization in an integrated manner. These efforts aim to transform high-quality local ecological resources into sustainable ecological industries and economic advantages, enhancing both the economic value of ecological resources and the green value of development.

Shibadong Village Becomes a New Tourism Landmark in Xiangxi, with China Minmetals Launching a Targeted Poverty Alleviation Study Tour on the “Hemei Xiangtu” Platform

Shibadong Village in Huayuan County, Hunan Province, is the birthplace of targeted poverty alleviation and has unique political significance, but its tourism resources were previously underdeveloped. Since 2020, China Minmetals has focused on the red tourism resources of Huayuan County and invested more than CNY 20 million in grant assistance funds. The Company helped Shibadong Village and surrounding villages build tourism walkways, viewing platforms, scenic area streetlights, and other supporting tourism facilities, while improving infrastructure such as housing and drinking water. These efforts supported the successful upgrade of the Aizhai-Shibadong-Dehang Grand Canyon Scenic Area to a national 5A-level tourist attraction and helped develop Shibadong Village into a new tourism landmark in Xiangxi. With support from China Minmetals, the per capita income of Shibadong Village increased from CNY 1,668 to CNY 28,000.

On May 19, 2025, the “Hemei Xiangtu” Central SOE Culture and Tourism Assistance Platform, a key platform developed by SASAC, was officially launched. China Minmetals’ “Kuangyao Xiangxi” Targeted Poverty Alleviation Study Tour” was launched simultaneously as one of the platform’s first 20 selected routes. Centered on iconic sites such as Shibadong Village and Aizhai Bridge, the study tour enables participants to experience the Party’s founding mission on site, understand the achievements of poverty alleviation, appreciate the distinctive cultural charm of the Miao ethnic group, and strengthen their sense of responsibility.



View of Shibadong Village



Launch Event of the “Hemei Xiangtu” Central SOE Culture and Tourism Assistance Platform

Expanding Consumption-driven Assistance to Smooth Production and Sales Channels and Benefit People’s Livelihoods

China Minmetals continued to expand pathways for consumption-driven assistance and actively participated in the “Central SOE Consumption-driven Assistance Spring Festival Campaign” and the “Central SOE Consumption-driven Assistance Week for Agricultural Development.” Through procurement-based assistance and sales-driven agricultural development, the Company effectively broadened sales channels for specialty agricultural products.

On March 20, 2025, China Minmetals took the lead in organizing the “Joining Hands in Hunan to Enrich Farmers and Support Agriculture” Consumption-driven Assistance Joint Action in Shibadong Village, Huayuan County. By engaging 27 participating organizations and integrating online and offline sales channels, the event showcased and sold more than 1,000 agricultural products and achieved sales of CNY

66.94 million

The Company launched special activities to bring consumption-driven assistance “into enterprises, project sites, and canteens,” focusing on five key consumption scenarios and directly increasing procurement by more than CNY

10 million

China Minmetals promoted the display and recommendation of specialty products in affiliated hotels and shopping malls and connected supply with high-end catering demand, creating a virtuous cycle of production determined by sales and mutual reinforcement between production and sales;

The Company implemented the “Cloud Market” campaign for quality rural products, incubated and developed several distinctive livestreaming accounts, expanded online sales channels, and helped farmers promote and sell high-quality mountain products, effectively increasing farmers’ income and prosperity.



“Joining Hands in Hunan to Enrich Farmers and Support Agriculture” Consumption-driven Assistance Joint Action



2025 “Central SOE Consumption-driven Assistance Week for Agricultural Development” Offline Specialty Product Fair



Innovative Gastrodia Products



Specialty Products Exhibition and Sales Event for Qilian County, Qinghai Province

1

Driving Higher-end Development through Stronger Innovation Momentum

A nation thrives when its technology flourishes; a nation is strong when its technology leads. China Minmetals regards sci-tech innovation as a strategic engine for shaping core competitiveness. Centering on the “five priorities” initiative, the Company closely responds to national strategic needs, aligns with the frontiers of the industry, and leverages its full value-chain advantages. In fostering new quality productive forces, and building a world-class enterprise, China Minmetals has taken the lead and forged ahead with determination.

- Focusing on the development of sci-tech R&D platforms
- Focusing on the improvement of platform R&D capabilities
- Focusing on the tackling of major technological challenges
- Focusing on the commercialization and industrialization of R&D outcomes
- Focusing on building a sci-tech talent team



Focusing on the Development of Sci-tech R&D Platforms

China Minmetals has worked to build itself into a national strategic sci-tech force. The Company owns 48 national sci-tech R&D platforms of various types, covering the full chain of applied basic research, technology R&D, engineering translation, industrial application, inspection and testing, and technical services. It has developed a high-level sci-tech R&D platform system with a sound layout and coordinated functions, laying a solid technological foundation for serving major national strategies and leading high-quality, innovation-driven industrial development.



The Company owns

48

national sci-tech R&D platforms of various types, including:

1

national technology innovation center

4

national key laboratories

2

national engineering research centers

8

national engineering technology research centers

Building a platform system led by the **National Innovation Center**, with **national key laboratories** as key nodes and other **national-level platforms** as support

The Company has continued to strengthen the development of national key laboratories. It established an annual special fund of approximately CNY 200 million for national key laboratories and created “green channels” for talent introduction and development, project research, and award recommendations. In 2025, in line with the principle that “stronger implementation efforts receive stronger support,” the Company launched 13 new special projects for national key laboratories and allocated CNY 188 million in funding. By 2025, the Company had cumulatively supported 33 special projects, significantly enhanced the innovation capabilities of four national key laboratories, and achieved a number of important breakthroughs in critical and core technology fields, including special cutting tools made of cemented carbide, pollution and carbon reduction and resource recycling in the steel industry, green development of deep-sea mineral resources, and safe mining of deep mineral resources.

By the end of 2025

The Company had cumulatively supported

33

special projects

The innovation capabilities of

4

national key laboratories had been significantly enhanced



Accelerating the Development of the National Technology Innovation Center for the Efficient Development of Strategic Rare Metal Minerals



In 2025, China Minmetals registered and established the legal entity of the National Innovation Center, Minmetals National Innovation Center Technology (Hunan) Co., Ltd. It established the Company's Board of Directors, appointed several academicians as members of the Technical Committee of the National Innovation Center, held a signing ceremony with 12 co-construction partners, and launched the operation of 7 research centers. This marked a new chapter in the Center's substantive operation. The first tranche of CNY 328 million in funding to support the National Innovation Center was fully in place. The Qinghai Sub-center and Gansu Sub-center were newly established. China Minmetals accelerated the development of pilot-scale experiment platforms for key metal smelting and robots for non-coal underground mining operations, striving to build the Center into an innovation hub that leads technological transformation and industrial upgrading in China's strategic rare metal minerals sector.



Unveiling Ceremony of the National Innovation Center

China Minmetals' Second Sci-tech Innovation Conference and Conference on the Integrated Development of Non-ferrous and Ferrous Metal Technologies Held Successfully



On January 15, 2026, China Minmetals' Second Sci-tech Innovation Conference and Conference on the Integrated Development of Non-ferrous and Ferrous Metal Technologies was held in Beijing. Under the theme of “Technology-led Development, Original Technology Hubs, and Integrated Progress,” the conference brought together academicians, experts, and leading enterprises across the industry to promote the integrated development of technologies in the non-ferrous and ferrous metal sectors, as well as the deep integration of sci-tech innovation and industrial innovation. The conference released a promotional video on technology integration and launched related integration activities. It appointed 17 academicians of the Chinese Academy of Sciences and the Chinese Academy of Engineering as members of the Expert Advisory Committee, signed “open competition” research project agreements with 10 academician teams, signed strategic cooperation agreements with two national laboratories, and held four thematic technical exchange sessions. These efforts injected strong innovation momentum into the high-quality development of the metals and mining industry.



Conference Site

Focusing on the Improvement of Platform R&D Capabilities

China Minmetals has built a four-level coordinated sci-tech innovation management system consisting of the Sci-tech Committee, specialized committees, research institutes, and responsible units. This has created a “one chessboard” pattern for sci-tech innovation, featuring full-domain coordination and efficient overall planning. In 2025, focusing on major strategic tasks such as strategic emerging industries, future industries, and the development of original technology hubs, the Company systematically organized integrated technology research, continued to expand the implementation scope of the “open competition” mechanism, intensified open research, and comprehensively improved sci-tech innovation efficiency.

Building Original Technology Hubs

The Company formulated administrative measures for original technology innovation hubs and established sound mechanisms for organizational management, policy support, and assessment and evaluation. It systematically identified technology targets that are foundational, urgent, frontier-oriented, and disruptive, prepared project task documents for the development of original technology hubs, coordinated the allocation of innovation resources, and implemented a quarterly tracking mechanism to steadily advance research on original and leading technologies.

Focusing on

3

approved original technology hubs in deep-earth mineral resource exploration and development, deep-sea mineral resource exploration and development, and pollution control in the metallurgical industry

Systematically identifying

115

research tasks for foundational, urgent, frontier-oriented, and disruptive technologies

Building a Base for Future Industrial Development

The Company organized an annual work advancement meeting of the Future Industrial Innovation Consortium and high-level technical exchange seminars to summarize progress and results and to share and discuss management experience in depth. It organized 19 central SOEs to prepare the China's 15th Five-Year Plan for future industries in deep-earth and deep-sea fields. The Company completed annual targets for key technologies, typical scenarios, and major projects in two leading fields: deep-earth mineral resource exploration and development and deep-sea mineral resource exploration and development, as well as five participating fields including underground space utilization. It developed a cold-atom gravimeter, pioneered ultra-deep well high-concentration backfill technology, and completed more than 90% of the total infrastructure works required for trial production at the Chentaigou Iron Mine. It also achieved breakthroughs in core technologies such as efficient collection and lifting in deep-sea mining and underwater precision docking, laying a solid foundation for the high-quality development of future industries.

Deepening Industry-University-Research Collaboration

The Company proactively connected with leading research platforms and high-quality universities and research institutes. It formally signed strategic cooperation agreements with Hefei National Laboratory and Laoshan Laboratory, making targeted deployments in the two frontier emerging fields of quantum technology and deep-sea mining to seize technological leadership in the industry. It also carried out cross-regional and multi-level in-depth cooperation with universities such as University of Science and Technology Beijing and Harbin Institute of Technology, as well as research institutions including the Chinese Academy of Sciences, to jointly tackle core technological challenges in the industry.

Strengthening Internal Consortia

The Company worked to remove internal barriers to innovation and integrated advantaged resources to build an innovation ecosystem. It established seven specialized internal innovation consortia in areas such as manganese resources and antimony materials. It also led the implementation of the “chain leader” mechanism in areas such as hard materials, beryllium resources, and thermal engineering equipment, bringing together strong innovation synergies in critical and core fields and accelerating coordinated industrial upgrading.

Focusing on the Tackling of Major Technological Challenges

Leveraging the integrated synergy of the Group, China Minmetals has focused on breakthroughs in critical and core technologies, worked to develop a number of landmark core technology equipment and products, fully ensured the autonomy and controllability of key technologies, and steadily advanced high-level sci-tech self-reliance and self-strengthening. Throughout the year, the Company secured approval for 76 sci-tech projects of various types, including national major sci-tech projects, national key R&D programs, and National Natural Science Foundation projects, representing a year-on-year increase of more than 150%. For the first time, it took the lead in undertaking three national major sci-tech projects in areas such as deep-earth, intelligent manufacturing, and high-end CNC machine tools, receiving CNY 144 million in national funding. Its capability to undertake national-level research projects and its innovation competitiveness were significantly enhanced.

Receiving approval for the first time to lead

3

national major sci-tech projects

10

major sci-tech special projects and

34

youth fund projects were approved

20

“open competition” projects were formed, including

10

in cooperation with academicians teams

3

research tasks under Phase II of the 1025 Special Project were successfully completed

29

tasks under Phase III were approved, ranking **among the top central SOEs**

Academician-led research projects were organized and implemented, with more than CNY

60

million in special sci-tech funding allocated



Advancing Mineral Industrial Development

- Deploying the integrated spaceborne-airborne-ground-downhole three-dimensional resource exploration technology system and building China's first 1,500-mu quantum mineral exploration platform
- Accelerating comprehensive resource utilization and tackling major technological challenges in the mining and beneficiation of low-grade domestic beryllium resources; enabling Zhuzhou Smelter Group to achieve the enrichment and effective recovery of germanium metal for the first time; increasing the antimony flotation recovery rate at Hsikwangshan Twinkling Star's mining and processing plant by 11.94 percentage points; and achieving large-scale recovery of bismuth resources at Huangshaping for the first time, with a recovery rate of over 80%



Independent Supply of High-end Materials

- Successfully preparing 8N high-purity antimony
- Achieving domestic substitution of 22 high-end silicon-based materials, including ultra-high-purity polysilicon, high-purity silicon nitride, and high-purity silicon-based electronic specialty gases
- Advancing the “integrated magnesium metal project” campaign, with 96 tasks moving from lab-scale testing to pilot-scale testing and key breakthroughs achieved across multiple technical routes



Transformation and Upgrading of the Metallurgical Industry

- Completing the world's thickest 480 mm slab continuous casting project at Longteng Special Steel
- Building the world's first explosion-proof and anti-clogging waste heat recovery system
- Developing the world's first miniaturized supercritical primary reheat gas-fired power generation technology

Accelerating Deep-sea Mineral Resource Exploration and Development



China Minmetals achieved a number of major sci-tech innovations in deep-sea mineral resource exploration and development. In March 2025, the *Environmental Impact Statement for Individual Tests of a Mining Vehicle*, led by Changsha Research Institute of Mining and Metallurgy Co., Ltd., was approved by the Council of the International Seabed Authority. It became China's first and the world's fifth approved environmental impact statement for deep-sea mining, marking a key step in China's commercial development of deep-sea mineral resources. In October, Changsha Research Institute of Mining and Metallurgy Co., Ltd., as the lead and command unit for the sea trial, successfully completed the offshore test of the world's first set of non-metallic, unbonded, intelligent flexible mixed-conveyance pipeline. The test was conducted in a 103-meter-deep sea area, representing a major breakthrough in deep-sea mining transportation technology. In January 2026, China Minmetals successfully completed the 2025 exploration voyage in its polymetallic nodule contract area. Through forward-looking baseline survey planning, the Company systematically accumulated fundamental data on the deep-sea environment, providing scientific support for deep-sea mining vehicle tests.



Equipment Recovery Operations Conducted by R/V Dayang in China Minmetals' Contract Area

Focusing on the Commercialization and Industrialization of R&D Outcomes

China Minmetals has focused on sci-tech innovation and the commercialization and industrialization of R&D outcomes. The Company has built commercialization platforms, developed various incubation platforms, and strengthened support capabilities for R&D outcome transformation. It has continued to tackle core technologies and achieved a series of landmark sci-tech innovation outcomes. It has also strengthened patent portfolio development and standards formulation, delivering fruitful patent achievements and continuously enhancing its voice in standard-setting. Through sci-tech innovation, China Minmetals has led the high-quality development of the industry.

Strengthening Collaborative Mechanisms



The Company established an internal market-oriented and contract-based collaboration mechanism and issued the *Measures for Promoting Market-oriented and Contract-based Cooperation between Research Institutions and Industrial Units*.



It developed the China Minmetals Exhibition of Mining and Metallurgical Sci-tech Achievements, and released China Minmetals' Top Ten Science and Technology Innovation Achievements of 2025 at China Minmetals' Second Sci-tech Innovation Conference.



China Minmetals also established a major matters entrustment mechanism, issued 10 letters of entrustment, and formed three major research projects and soft science research topics.



It regularly organized supply-demand matchmaking meetings between research institutions and industrial units. Throughout the year, 11 sci-tech achievements were promoted, with some already forming cooperation plans.



The Company also built an online platform for R&D outcome commercialization and industrialization, releasing 105 sci-tech achievements and 68 research needs, of which 6 had been claimed online through the open competition mechanism.

Improving the Incubation System

The Company enhanced its incubation capacity for the commercialization and industrialization of R&D outcomes. It has cumulatively built 41 pilot-scale verification platforms, 9 industrial incubators, and 6 sci-tech industrial parks.

- In 2025, the Company comprehensively advanced the demonstration and review of 6 key pilot-scale platforms.
- The common pilot-scale platform for key metal smelting accelerated construction.
- In partnership with Minmetals Innovative Investment Co., Ltd., the Company established an R&D outcome commercialization fund under the second-phase sci-tech innovation fund, focusing on mitigating investment risks in key stages such as pilot-scale testing and first-of-its-kind equipment application, thereby providing strong support for outcome incubation.

In 2025

8 pilot-scale platforms were included in the *Catalogue of Open Services for Pilot-scale Verification Platforms of Central SOEs (2025 Edition)*, and **3** were successfully recommended as reserve pilot-scale platforms of the Ministry of Industry and Information Technology

Tackling Core Technologies

The Company focused on breakthroughs in critical and core technologies, with major sci-tech achievements continuing to emerge. It successfully built the world's first 10,000-ton-level industrial demonstration line for lithium extraction from raw salt-lake brine, overcame core technologies for long-distance slurry pipeline transportation, solved the challenges of efficient recovery and high-value utilization of multiple metal resources from bulk industrial solid waste, and achieved breakthroughs in the preparation technology of nuclear-grade natural graphite. A series of landmark sci-tech innovation outcomes have injected strong "Minmetals strength" into the sustainable development of the industry.

Tackling Core Technologies for Lithium Extraction from Salt Lakes and Building the World's First 10,000-ton-level Demonstration Line for Lithium Extraction from Raw Salt-lake Brine



China Salt Lake focused on the efficient and green development of salt lake resources. It achieved breakthroughs in critical and core technologies such as targeted lithium-ion extraction from raw brine and energy efficiency coupling, successfully developed sulfate-resistant adsorbents and continuous moving-bed equipment, built an intelligent control system and a new lithium precipitation process, and realized technological innovation featuring "lithium extraction before potash recovery." In 2025, the world's first 10,000-ton-level industrial demonstration line for lithium extraction from raw salt-lake brine was completed and put into operation. The overall lithium resource recovery rate exceeded 70%, more than doubling that of traditional processes. The project achieved three core breakthroughs in process innovation, cost optimization, and green and low-carbon development. It successfully created a new industrial development model for salt lake resources featuring "lithium first, potash later," marking a new era in the application of efficient, short-process, and green lithium extraction technology from raw salt-lake brine.



World's First 10,000-ton-level Industrial Demonstration Line for Lithium Extraction from Raw Salt-lake Brine



Key process technologies and equipment for long-distance slurry pipeline transportation - Large High-pressure Diaphragm Pump Station



Building a Source of Technological Innovation for Natural Graphite

Minmetals Exploration & Development Tackles Deep Prospecting Challenges in Old Mines through Technological Research



Minmetals Exploration and Development Co., Ltd. continued to carry out sci-tech research on metallogenic theories, prospecting technologies, and equipment. It innovatively used zircon isotopes to reveal the mechanisms of highly fractionated granites and rare metal enrichment in the Nanling region. It proposed metallogenic theories such as “full-temperature-range mineralization” and “superimposed emplacement by multi-stage magmatism,” and developed prospecting technologies suitable for thick overburden areas. These efforts provided scientific guidance for major breakthroughs in deep and peripheral prospecting at old mines in the Nanling region. It completed the overall plan for China Minmetals’ full-spectrum hyperspectral resource exploration satellite and carried out three-dimensional resource exploration based on the integrated spaceborne-airborne-ground-downhole system. It used superconducting transient electromagnetic technology to overcome bottlenecks in deep resource exploration at old mines in the Nanling region, laying a solid theoretical and technological foundation for major prospecting breakthroughs.

Strengthening Patent Portfolio Development

The Company continued to strengthen patent creation, protection, and application, standardize intellectual property protection, and actively advance standards formulation. It supported sci-tech innovation and industry leadership with high-quality patents and high standards, and transformed intellectual property and standards outcomes into core competitiveness. Throughout the year, the Company achieved fruitful and significant results in patent and standards work.

In 2025

A total of
7,637
patents were granted

3,514
valid invention patents
were added throughout
the year, representing a
year-on-year increase of
23.86%

By the end of 2025

Valid patents exceeded
66,800

These included
23,200
valid invention patents and
696
PCT patents

The proportion of valid invention patents rose to
34.72%
up **2.89** percentage points
year on year

More than **2,600** international, national, and
industry technical standards formulated or revised under the
Company’s leadership or participation



1 achievement won the Silver Award at the 25th China Patent Award

Project name: Long-span support and mid-span coordinated prestressed box-shaped continuous steel beam-column structure
Completed by: Central Research Institute of Building and Construction Co., Ltd.

3 achievements won Excellence Awards at the 25th China Patent Award

Project name: Segment device for heavy reduction of continuous casting slabs
Completed by: Capital Engineering & Research Incorporation Limited

Project name: A soaking sintering method based on layered composite heat supply
Completed by: Zhongye Changtian International Engineering Co., Ltd.

Project name: A production process and production system for ultra-high-purity polysilicon and silicon derivatives
Completed by: China ENFI Engineering Corporation and China Silicon Corporation Ltd.

Focusing on Building a Sci-tech Talent Team

China Minmetals attaches great importance to building its sci-tech talent team. By improving systems and mechanisms, strengthening training, building growth platforms, and enhancing funding support, the Company has continued to stimulate the innovation and creativity of research talent. The Company has fostered a positive, ethical, and integrity-driven sci-tech talent team, providing solid talent support for sci-tech innovation and development. In 2025, the Company had more than 30,000 sci-tech personnel.

Improving the Sci-tech Management System

Systematically building a full-chain and full-element sci-tech management system covering sci-tech platforms, research projects, sci-tech achievements, and outcome commercialization; optimizing the project approval procedures for Company-level sci-tech projects; and accelerating project approval.

Building a High-level Talent Pipeline

Establishing the Expert Advisory Committee under the Sci-tech Committee and flexibly introducing 22 academicians as members of the committee; appointing five new chief technical experts in emerging fields in 2025; and doubling the number of youth fund applications.

Optimizing Assessment and Incentive Mechanisms

Increasing the weighting of key sci-tech innovation tasks for research institutes and technology-oriented enterprises; and establishing incentives for key sci-tech innovation matters in line with SASAC’s assessment and incentive policies.

Strengthening Funding Support

Adding special funds for the National Innovation Center and specialized committees; increasing R&D funding for subsidiaries to CNY 609 million in 2025; planning the second-phase sci-tech innovation fund with a total scale expected to reach CNY 3 billion; and providing CNY 45 million in annual special funds to specialized committees in nine fields to support their work.

Developing Specialized Talent for R&D Outcome Commercialization

Carrying out the second technical manager training program for directly managed enterprises and key subsidiaries in 2025; cultivating a second cohort of 63 “senior technology managers”; increasing the cumulative number of trained senior technology managers to 94; and initially building a specialized talent team for R&D outcome commercialization that understands technology, economics, and law, and is familiar with the market and skilled in business operations.

2 Driving Higher-quality Development through Improved Industrial Quality and Efficiency

Solid industries lay the foundation, and industrial development opens a new chapter. China Minmetals aims to build a world-class enterprise group with global competitiveness in the metal and mining industry. By optimizing industrial layout through industrial coordination, strengthening support through two-way empowerment between industry and finance, building its brand through quality-driven enterprise development, and fulfilling its commitments through an integrated service system, the Company has advanced high-quality development across the board.

- Advancing industrial synergy for shared growth
- Promoting industry-finance integration
- Deepening product quality
- Providing excellent services



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Advancing Industrial Synergy for Shared Growth

Taking “refocusing on core businesses, realigning industries, and concentrating resources” as its pathway, China Minmetals continued to optimize its industrial layout and strengthen its core competitiveness. The Company promoted the transformation of industrial development toward greater intensification, coordination, and high-end development, striving to build a world-class enterprise group with global competitiveness in the metal and mining industry.

Metals and Minerals

China Minmetals continued to expand its global layout for mineral industrial cooperation and consolidate the foundation for mineral industry development. It activated industrial development momentum, pushed forward the implementation of key projects. The Company also upgraded its trade and logistics system, innovated operational models, and comprehensively boosted the full-industry-chain operation and supporting capacity for strategic minerals.

Consolidating the Foundation for Mineral Industry

China Minmetals established a five-in-one work system covering “targets, pathways, measures, mechanisms, and support.” In 2025, the Company held its first resource work conference and strengthened exploration efforts. The Company set up special task forces for cooperation with key provinces, deepened central-local cooperation with local governments in the field of mineral resources, and explored new central-local cooperation models such as “resources + industry,” “technology + market,” and “capital + projects.” It issued the *Measures for Mining Rights Management* and related work guidelines, and built a professional and efficient resource project operation system.

Continuously Expanding the Resource Footprint

- Owning 41 mines at home and abroad across Asia, Oceania, South America, Africa, and other regions, including 15 overseas mines; operating world-class producing mines such as Las Bambas Copper Mine in Peru, Dugald River Zinc Mine in Australia, Ramu Nickel-Cobalt Mine in Papua New Guinea, and Shizhuyuan Polymetallic Mine, as well as Qarhan Salt Lake, the world’s second-largest soluble potassium-magnesium salt deposit
- Holding 28 types of mineral resources, with tungsten, crystalline graphite, and bismuth resources ranking among the highest globally; lithium, potassium, zinc, lead, antimony, chromium, fluorite, and other resources or output ranking in the global top tier; and copper, iron, nickel, and cobalt resources ranking in China’s top tier

Achieving Fruitful Prospecting Breakthroughs

- Achieving significant prospecting results in 10 deep and peripheral prospecting projects, including Siah Diq, Duddar, and Ramu
- Actively advancing nickel projects in Brazil and manganese projects in South Africa in external resource acquisition
- Successfully winning the bid for the Liaoning Huahonggou Iron Mine Project through mining rights tendering, auction, and listing, further strengthening the iron ore resource layout

Continuously Advancing Major Projects

- Completing and putting into operation China Salt Lake’s 40,000 + 20,000 + 15,000-ton lithium carbonate projects
- Accelerating the construction of the Chentaigou Iron Mine Project
- Fully launching the construction of Phase II of the Khoemacau Project
- Realizing the first return shipment of copper concentrate from Las Bambas Mine using self-owned shipping capacity, with full-process control; and completing the first return shipment of molybdenum concentrate via Chancay Port, enabling faster transportation and lower costs
- Maintaining stable production and improving efficiency at the Saindak Project

Commissioning China Salt Lake’s 40,000 + 20,000-ton Lithium Salts Project

In September 2025, China Salt Lake’s 40,000 + 20,000-ton lithium salts project was successfully put into operation in Golmud, Haixi Prefecture, Qinghai Province. Adopting world-leading technologies, the project comprehensively enhanced China’s capacity to secure lithium resource supply, stabilize industrial chains, and improve technical equipment capabilities. It further strengthened the autonomy and controllability of China’s lithium battery industrial chain and provided solid support for securing its independent and controllable development.



Project Launch Ceremony

Activating Industrial Development Momentum

China Minmetals is a core backbone enterprise in China’s smelting of base metals such as copper, lead, and zinc. Its lead and zinc smelting capacity ranks among the highest in China, its “Torch” brand products enjoy a global reputation, and its antimony oxide output leads the world. In the tungsten industry, the Company has built a full value-chain layout covering mining, smelting, processing, and trade, with strong visibility and influence in the international market.

Commissioning an Intelligent Production Line for Ultrafine Tungsten Carbide Powder

The intelligent production line for ultrafine tungsten carbide powder of Zhuzhou Cemented Carbide Group, a subsidiary of China Tungsten and Hightech, is a key project under the 102 major national projects of the 14th Five-Year Plan and the “Top 100 Projects” for strategic emerging industries. After two years of construction, the project built an intelligent production line with an annual capacity of 3,000 tons of high-quality ultrafine tungsten carbide powder.

The project adopted a number of domestically pioneering, highly efficient, and low-consumption fully automated powder production equipment, significantly improving production efficiency and product quality. Production efficiency increased nearly fourfold, and processing costs decreased by more than 30% year on year. The project pioneered special docking control technology, effectively solving the long-standing challenge of automatic feeding for materials with extremely poor flowability. It also innovatively built a three-dimensional logistics system, using an MES system, AGV intelligent handling equipment, and an automated storage and retrieval system (AS/RS) to achieve cross-floor material transfer. In addition, the project promoted the application of energy-saving and low-carbon technologies such as waste heat recovery and reactive power compensation, reducing carbon dioxide emissions by approximately 1,750 tons per year. It has set a benchmark for “green and intelligent manufacturing” in the industry and supported the achievement of the Carbon Peaking and Carbon Neutrality Goals.

The successful commissioning of the project not only addressed critical tech bottlenecks in high-end cemented carbide materials and achieved domestic substitution of high-performance ultrafine tungsten carbide powder, but also ensured the autonomy and controllability of the full cemented carbide industrial chain. It further promoted the transformation and upgrading of China’s cemented carbide industry toward high-end, intelligent, and green development, supported the high-quality development of China’s new materials sector, and injected strong momentum into China Tungsten and Hightech’s efforts to build a world-class tungsten industry group with global competitiveness.



Intelligent Production Line for Ultrafine Tungsten Carbide Powder of Zhuzhou Cemented Carbide Group

Hsikwangshan Twinkling Star Tackles Efficient Antimony Oxide Flotation Technology to Improve Resource Utilization

In 2025, Hsikwangshan Twinkling Star successfully tackled efficient antimony oxide flotation technology, solving a resource recovery challenge that had long constrained the enterprise. The Company established a dedicated technical team to carry out research. Taking a sulfurizing agent as the core activating reagent, the team conducted more than 100 tests, finely adjusted reagent formulas and addition methods, and optimized flotation process parameters. After more than three months of industrial verification, the technical solution was successfully applied in production. The recovery rate of oxide-phase flotation rose to around 45%, the overall flotation recovery rate increased by more than 10 percentage points, and the antimony grade in tailings decreased to approximately 0.45%. Based on annual processing capacity, the technology can recover more than 70 additional tons of antimony metal each year, directly creating benefits of more than CNY 5 million.



Technical Team Conducting Research on Reagent Parameter Optimization

Building a Globally Coordinated Network

China Minmetals has a global trade and distribution network, with strong warehousing, logistics, distribution, and delivery capabilities. It is a large-scale metals and minerals circulation service provider in China with extensive network coverage and comprehensive service capabilities, maintaining a leading domestic position in bulk metallurgical raw material trading and steel engineering supply services.

Minmetals Development Provides Full-Process Logistics Support to Enhance Independent Operation Capabilities Across the Mineral Supply Chain

In December 2025, Minmetals Logistics, a subsidiary of Minmetals Development, successfully transported 55,000 tonnes of copper concentrate from the Las Bambas project in Peru to Fangchenggang, China, via its self-owned bulk carrier "Mingjian." This marked the first full-vessel return shipment of China Minmetals' copper concentrate completed by Minmetals Development under a fully self-managed model using its own shipping capacity. It also signified a new level of independent operation and logistics support capabilities across the company's mineral resources supply chain, supporting its strategic transformation into "a new logistics provider serving China Minmetals' core businesses."



Minmetals Development Completed Its First Full-Vessel Transportation of Copper Concentrate Using Self-Owned Shipping Capacity

Metallurgical Construction

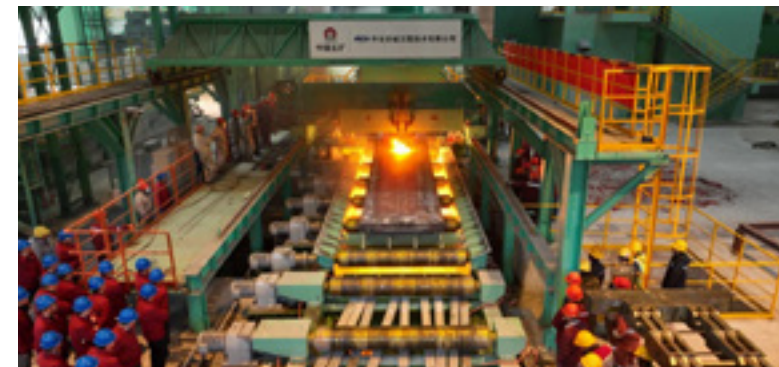
China Minmetals continued to strengthen its engineering construction capabilities and achieved new breakthroughs in high-end metallurgical construction and diversified infrastructure engineering. It has delivered a number of landmark and influential premium projects, fully demonstrating its responsibility and strong core capabilities.

Metallurgical Engineering

China Minmetals has undertaken the planning, survey, design, and construction of major large and medium-sized steel enterprises in China. It has accumulated core technological advantages as well as design and construction capabilities across all stages, and has delivered a number of high-quality metallurgical engineering projects with global influence.

CERI Successfully Delivers the World's Thickest Extra-heavy Slab Continuous Caster

In January 2025, the No. 6 extra-heavy slab continuous caster of the electric furnace green technology transformation project of Longteng Special Steel, contracted by MCC Capital Engineering and Research Incorporation Limited, successfully completed hot-load testing. This marked the successful completion of the world's thickest straight-curved slab continuous caster, providing "CERI wisdom" and a "CERI solution" for the technological upgrading of China's steel industry, especially in the field of ultra-large, high-quality steel plates.



Electric Furnace Green Technology Transformation Project of Longteng Special Steel

WISDRI Supports the First Coil Roll-off of Lianyuan Iron & Steel's High-end Silicon Steel Project

In August 2025, the No. 2 continuous annealing and coating line of the LY Steel cold-rolled silicon steel project, contracted by WISDRI Engineering & Research Incorporation Limited, successfully completed hot-load testing in one attempt. The first coil, with a specification of 0.5 × 1,255 mm, successfully rolled off the line, and key performance indicators of the silicon steel product, including iron loss and magnetic induction, reached industry-leading levels. As one of the top 10 key projects in Hunan Province, the project featured a series of green and intelligent technologies independently integrated by WISDRI, including efficient degreasing. It is a typical example of "Intelligent Manufacturing in China" empowering high-quality development.



First Coil Roll-off of Lianyuan Iron & Steel's High-end Silicon Steel Project Supported by WISDRI

Building a Green, Intelligent, and Efficient Wide and Heavy Plate Production Line



In August 2025, the process equipment upgrading and product structure adjustment project of JISCO Group's smelting and rolling plant, contracted by CISDI and jointly constructed by China First Metallurgical Group Co., Ltd., China MCC17 Group Co., Ltd., Shanghai Baoye Group Corp., Ltd., and other participants, was officially put into operation. The project achieved efficient and high-quality delivery with zero outstanding items.

The project formed a production scale of 2.3 million tons of continuous casting slabs and 1.2 million tons of wide and heavy plates per year. Its products range from 6 to 100 mm in thickness and from 1,500 to 3,800 mm in width, covering high-value-added wide and heavy plate products such as steel for new energy applications, high-grade steel for hydro-power, super weather-resistant bridge steel, and high-grade steel for chemical pressure-bearing applications. The project will help JISCO build the most competitive premium steel manufacturing base in Northwest China and inject strong new momentum into the improvement of the high-end equipment manufacturing industrial chain and high-quality industrial development in the region.



4,200 mm Wide and Heavy Plate Production Line

Baosteel Zhanjiang Iron & Steel Hydrogen-based Shaft Furnace Project



MCC focuses on process-flow innovation and R&D into frontier low-carbon technologies. It actively promotes efficient and circular green metallurgical technologies, providing full-process technical support and engineering practices for the industry's green and low-carbon transition. MCC built China's first million-ton-level hydrogen-based shaft furnace project. The project is also the first direct reduced iron production line to integrate hydrogen and coke oven gas for industrial production. Compared with traditional carbon metallurgy, hydrogen metallurgy uses hydrogen as both fuel and reducing agent, enabling ironmaking to reduce its dependence on fossil energy. Compared with the traditional blast furnace ironmaking process, the project can reduce carbon dioxide emissions by more than 60%. After being put into operation, it is expected to reduce emissions by 500,000 tons per year, providing an important demonstration for the steel industry in exploring green hydrogen applications.



Hydrogen-based Shaft Furnace Project

CISDI's Smart Steelmaking System Leading Green and Intelligent Transformation in the Industry



On December 23, 2025, with the energization of the electric furnace at Zhanjiang Steel's near-zero-carbon production line, China's first million-ton-level near-zero-carbon steel production line, for which CISDI Engineering Co., Ltd. undertook overall design, plant design, and the complete supply of main equipment, was fully connected. The project accelerated the green and low-carbon transformation of the steel industry and demonstrated China's independent innovation strength in high-end steel manufacturing and low-carbon technologies.

Traditional long-process steel production relies on blast furnace ironmaking and has high carbon emission intensity. In contrast, short-process electric furnace steelmaking uses scrap steel as the main raw material and can reduce carbon emissions by more than 50% compared with traditional processes, making it a core direction for the industry's low-carbon transformation. Previously, however, electric furnace steelmaking in China was largely limited to ordinary steel

production. Constrained by technical bottlenecks such as raw material adaptability, smelting efficiency, and process stability, it was difficult to meet the stringent requirements of high-grade automotive sheets for purity and performance.

Zhanjiang Steel and CISDI made a breakthrough in response to this industry pain point. Using "hydrogen-based shaft furnace DRI + scrap steel" as the raw material route, they built a complete short-process system covering hydrogen-based shaft furnace reduction, efficient electric furnace smelting, and low-carbon rolling. The near-zero-carbon slabs produced by the line can meet the needs of new energy vehicles and high-end passenger vehicles for lightweight, high-strength, and low-emission steel. The project filled the gap in near-zero-carbon production of high-grade automotive sheets in China and established a closed-loop industrial chain from the production to the application of near-zero-carbon steel products.

Basic Construction

Leveraging the technological and construction strengths it has accumulated over the years in metallurgical construction, China Minmetals achieved outstanding results in infrastructure, rail transit, high-end building construction, urban renewal, ecological and environmental protection, theme parks, and other fields. With first-class construction capabilities, the Company empowered urban development.

Shanghai Baoye Builds a World-class Culture and Tourism Landmark with Millimeter-level Precision and Cross-material Color Matching Technology



In undertaking the Shanghai LEGO-LAND Resort project, Shanghai Baoye faced the extreme challenge of enlarging 8 mm building blocks by 750 times into architectural structures. The project team reduced joint deviations from the centimeter level to within 2 mm, achieving a leap from "toy-level precision" to "architectural scale." To address color consistency, the team created "digital identities" for 56 standard colors and conducted more than 100 experiments to overcome the challenge of cross-material color matching, ensuring long-lasting color stability and seamless restoration. It also adopted an innovative lean and green construction model featuring factory prefabrication and on-site assembly, and pioneered a technical system for constructing complex scenes in large-scale theme parks. These efforts contributed a sustainable "China solution" to the culture and tourism industry.



DADA, the World's Largest LEGO Minifigure

China MCC5 Group Drives New Quality Productive Forces through Smart Construction to Build an Urban Landmark



During the construction of the Xiong'an International Trade Center project, China MCC5 Group Corp., Ltd. took the lead in applying its self-developed "lightweight building machine." Through structural optimization, the equipment significantly reduced load. With its original "external climbing and internal turnover" model, the project achieved synchronized construction of horizontal floor slabs and vertical shear walls for the first time, creating an efficient "aerial assembly line." The construction cycle for a single floor was shortened from about 10 days to 6 days, improving efficiency by approximately 40%. The project integrated AI video recognition and real-time stress monitoring systems to enable intelligent and proactive prevention and control of construction safety risks. It also deeply applied BIM and digital twin technologies to build a smart management platform based on a "one model throughout" approach, providing an important technical demonstration for the development of the new area.



Xiong'an International Trade Center Project

China 19th Metallurgical Corporation Helps Open the Chongqing-Hunan Double-track Expressway, Turning Natural Barriers into Thoroughfares



On December 18, 2025, the Chongqing-Hunan Double-track Expressway, in which China 19th Metallurgical Corporation participated, opened to traffic along its full length, becoming a core hub on the eastern route of the New International Land-Sea Trade Corridor. Located in a protected area of a world karst natural heritage site, the project had a bridge-to-tunnel ratio as high as 88.73%. With numerous karst caves, steep terrain, and extremely stringent environmental protection requirements, construction was highly challenging. The project team used truck-mounted concrete pumps and tower cranes for multi-stage material transfer, overcoming pile foundation construction challenges on cliffs and steep slopes. It also carried out refined management through a digital construction platform based on "BIM + GIS." The project represents a vivid practice of the Company's efforts to build "quality projects".



Chongqing-Hunan Double-track Expressway

Strategic Emerging Industries

Focusing on enhancing core competitiveness and strengthening core functions, China Minmetals upheld the principles of strategic orientation and "new technologies, new industries, new business forms, and new models." The Company built a strategic emerging industry system covering high-end equipment manufacturing, new materials, energy conservation and environmental protection, and other fields. It accelerated the transition of strategic emerging industries from incubation to scaled development, working to build them into a second growth engine after its traditional core businesses.

High-end Equipment Manufacturing

The Company focused on breakthroughs in core technologies and industrial upgrading. It achieved fruitful results in multi-directional die forgings and expanded the diversified application scenarios of core technologies such as multi-directional die forging and prestressed steel wire winding. In strategic fields including aerospace, petrochemicals, and nuclear power, it achieved domestic substitution and batch delivery of key forgings, successfully developing "single-product champions" in niche sectors. Industrialization of prefabricated components also continued to advance. The Company achieved breakthroughs in key technologies for high-performance concrete preparation and modular assembly, significantly enhancing the autonomy, controllability, and market competitiveness of high-end equipment.

MCC Heavy Industry (Tangshan) Selected as a National-level Pilot-scale Verification Platform



In June 2025, the Multi-directional Die Forgings and Heavy Equipment Pilot-scale Verification Platform of MCC Heavy Industry (Tangshan) Co., Ltd. was successfully included in SASAC's *Catalogue of Open Services for Pilot-scale Verification Platforms of Central SOEs*. The platform focuses on strategic emerging industries such as aerospace, weaponry and equipment, and titanium alloys. It has built a three-in-one technology maturation service system covering complex component plastic forming, forging process optimization, and heavy equipment design. The platform has achieved breakthroughs in multiple core technologies and greatly improved component performance and reliability, providing key component verification services for major projects such as domestically produced large aircraft and next-generation spacecraft. This selection, with the platform of MCC Heavy Industry (Tangshan) as a representative example, highlights the Company's strong technological capabilities and industry benchmark position in high-end equipment manufacturing.



120 MN and 40 MN Multi-directional Die Forging Production Lines

MCC Construction Engineering Leads the Industrialization of Green Buildings with an Integrated Prefabricated Steel Structure Building System



MCC Construction Engineering built a prefabricated steel structure industrial base in Chongqing covering 200 mu, equipped with multiple production lines for heavy H-beams, pipe trusses and other products. Relying on its enterprise technology center and master craftsman studios, the company has built five-in-one full value-chain service capabilities covering R&D, design, fabrication, installation, and inspection, enabling end-to-end control from technology development to project construction. Its independently developed integrated prefabricated steel structure building system features standardized design, factory-based production, and assembly-based construction. With advantages such as strong seismic performance, energy conservation, environmental friendliness, and shorter construction periods, the system has been applied in hundreds of projects across China and overseas. The company has won the Luban Prize and National Quality Engineering Award several times, and the China Steel Structure Gold Award 11 times, setting an industry benchmark through technological innovation and outstanding engineering capabilities.



Intelligent T-Type Gantry Automatic Welding Machine

New Materials

China Minmetals has anchored its efforts in the goal of ensuring the autonomy and controllability of industrial chains and has made comprehensive deployments in the new materials sector. Focusing on key areas such as new energy, high-end cemented carbide, and silicon-based materials, the Company has achieved rapid development in new materials. The intelligent production line for ultrafine tungsten carbide powder achieved construction, commissioning, and production ramp-up within the same year. High-end aerospace cutting tools achieved domestic substitution at leading enterprises. Micro-drills with a length-to-diameter ratio of 50 entered mass production. A new-generation medium-nickel high-voltage cathode material passed validation by several leading battery cell manufacturers and achieved large-scale sales.

China ENFI Tackles Silicon-based Materials Technologies to Strengthen the Foundation of the Chip Industry



SINOSICO, a subsidiary of China ENFI Engineering Corporation, relying on the National Engineering Research Center for Silicon-based Materials Preparation Technology, tackled integrated circuit silicon-based materials technologies. They led 31 national, provincial, and ministerial research projects, took the lead in formulating one international standard, 7 national standards, and 5 industry standards, built three core original technology systems, mastered more than 20 key product preparation technologies, and established an autonomous and controllable system with industrialized application. The invention patent "A Production Process and Production System for Ultra-high-purity Polysilicon and Silicon Derivatives" won the Excellence Award at the 25th China Patent Award.

By the end of 2025

SINOSICO ranked first in China by market share for

7

categories of products

Its products were widely used in new energy vehicles and 5G mobile phones, providing a strong safeguard for China's independent supply of core integrated circuit materials.

Developing and Industrializing Key Technologies for High-performance Ultra-high-nickel Cathode Materials and Their Precursors



Minmetals New Energy Materials innovatively adopted composite-structure precursor preparation technology and cathode modification technology, solving challenges related to the capacity, power, and stable performance of ultra-high-nickel materials. This technology was first applied to large cylindrical tabless batteries, storing energy for the low-altitude economy and becoming a solid strategic foundation for the development of China's new energy industry.



Production Workshop for High-performance Ultra-high-nickel Cathode Materials

Cemented Carbide Preparation Technology for Nuclear-grade Mechanical Seals



China Tungsten and Hightech made every effort to advance the domestic substitution of cemented carbide seal rings for nuclear reactor coolant pumps. It overcame technical challenges such as high corrosion resistance and high radiation resistance, and developed cemented carbide mechanical seals with fully independent intellectual property rights. This completely broke the long-standing dependence on external suppliers and provided strong support for the autonomy and controllability of the technical systems of domestic nuclear power equipment enterprises.



Cemented Carbide Nuclear-grade Seal Ring



Aerial View of SINOSICO

Energy Conservation and Environmental Protection

China Minmetals has continued to deepen its presence in the energy conservation and environmental protection industry with its wastewater treatment capacity remaining among the highest among central SOEs. The Company has tackled core technologies for “photovoltaics + restoration,” reaching a leading level in China. It has achieved coordinated progress in ecological benefits, clean energy benefits, and people’s livelihood benefits, supporting the implementation of China’s Carbon Peaking and Carbon Neutrality Goals through green innovation.

China MCC23 Group Turns Waste into Value at the Wulie Mine in Changjiang

China MCC23 Group Co., Ltd. undertook the Wulie Town ecological restoration photovoltaic project in Changjiang County. As Hainan’s first innovative demonstration project successfully applying the “EOD model + mine restoration + photovoltaic development” approach, the project transformed a once-abandoned mine pit with exposed rocks and dust into an ecological oasis that generates power, restores greenery, and benefits local communities. The project team used drone aerial surveys and LiDAR to conduct precise terrain surveys, and innovated processes such as mountain material transportation and automated seeding for revegetation. By adopting the Ecology-Oriented Development (EOD) model, the project successfully integrated ecological restoration with the clean energy industry, providing a sustainable pathway for the governance of similar abandoned mines nationwide that balances ecological, economic, and social benefits.



Mine Site after Ecological Restoration

MCC Eco-Environmental Protection’s Chuzhou Sludge Hydrothermal Carbonization Demonstration Project

In May 2025, the Chuzhou sludge hydrothermal carbonization demonstration project of MCC Eco-Environmental Protection Group Co., Ltd. was successfully put into trial operation. Covering nearly 3,000 square meters, the project built a continuous hydrothermal carbonization production line with a daily treatment capacity of 50 tons of dewatered sludge at 80% moisture content. It mainly treats sludge from wastewater treatment plants under Chuzhou Water Affairs. The project adopts a process of “sludge pre-dewatering-hydrothermal carbonization-deep dewatering.” While reducing, stabilizing, and rendering sludge harmless, it converts products into biomass fuel and soil improvement materials. Through coupled incineration and mine restoration, the project has opened a pathway for sludge resource utilization. The successful operation of the project marks a key breakthrough by the enterprise in sludge treatment technology. It also provides a demonstration model for Chuzhou’s development as a “zero-waste city” and is of great significance for implementing China’s ecological civilization development and Carbon Peaking and Carbon Neutrality Goals.



Aerial View of the Chuzhou Sludge Hydrothermal Carbonization Demonstration Project

Promoting Industry-Finance Integration

China Minmetals has always upheld the principle of “industry as the foundation and finance as a tool.” Guided by the fundamental objective of serving the full value-chain of the metals and mining industry, the Company has precisely channeled financial resources into core links such as mineral exploration and development, resource integration, industrial upgrading, and risk management and control. This has enabled deep integration and two-way empowerment between financial businesses and the metals and minerals core business.

China Minmetals Holds a Meeting to Promote High-quality Development of Financial Businesses

In August 2025, China Minmetals held a meeting to promote the high-quality development of financial businesses. The meeting clarified that financial businesses should be oriented toward serving the core metals and minerals business and should adhere to their role in industry-finance integration. The Company released the *Guiding Opinions on the High-quality Development of Financial Businesses*, emphasizing that financial businesses must focus on the core business, strictly control risks, and pursue a sustainable, high-value, and low-risk development path. Through efficient implementation, China Minmetals will promote deeper coordination between finance and industry, support the Company in building a world-class enterprise group with global competitiveness in the metal and mining industry.



Meeting Site

Minmetals Securities Empowers the Real Economy through Specialized Bond Services

Minmetals Securities has continued to deepen its presence in specialized bonds, achieving breakthroughs in sci-tech innovation bonds, green bonds, and inclusive finance bonds, and becoming a benchmark among small and medium-sized securities firms in serving the real economy. In sci-tech finance, Minmetals Securities provided targeted services to enterprises such as Shanxi Road & Bridge and Guangxi Beibu Gulf Port Group. In green finance, it innovatively launched a “green + carbon neutrality + rural vitalization” triple-labeled REITs product, setting a new low for green bond interest rates in Zhejiang. In inclusive finance, it launched the first relevant bond issued by a state-owned financial leasing company in China. Relying on its “three investments and one strategy” industry-finance service model, Minmetals Securities has developed distinctive strengths as a specialized and refined securities firm through differentiated pathways, continuously providing vital financial support to the real economy.

Deepening Product Quality

Guided by the strategy of strengthening the enterprise through quality, China Minmetals continued to improve its quality management system and deepen its quality culture. Through systematic, standardized, and lean quality management practices, the Company has continuously enhanced the influence of its quality brands and injected strong momentum into high-quality development.

Improving the Management System

China Minmetals has developed a tiered quality management and control system to strengthen quality awareness and accountability across all levels. It continued to advance quality management system certification, enhance quality risk prevention and control, and pursue excellence through quality improvement initiatives and award programs. Through these efforts, the Company encouraged its subsidiaries to develop high-quality products, expand market presence through product excellence, and continuously improve their market competitiveness.



China Minmetals Quality Management Advancement Meeting Held in January 2026

China Salt Lake Empowers Brand Building through Quality Management



China Salt Lake continued to strengthen quality management. In 2025, the factory acceptance rate and quality supervision sampling pass rate for its core products, potassium chloride and potassium carbonate, both remained at 100%, with no quality incidents throughout the year. Potassium carbonate and potassium hydroxide products successfully passed international RoHS testing and certification. Small-particle urea products successfully passed on-site statutory inspection by customs authorities and were exported to Vietnam. Qualified zinc humate urea products successfully rolled off the production line, and PP products shifted toward high-value-added injection molding products. The brand value of “Yanqiao” potassium chloride increased significantly to CNY 20.226 billion, further enhancing China Salt Lake’s voice and influence in the potash industry.

Cultivating a Quality Culture

China Minmetals deeply practiced its quality culture of “valuing craftsmanship and pursuing excellence.” It compiled and released the *Corporate Culture Handbook of China Minmetals*, clarifying the quality culture philosophy, practical requirements, and prohibited behaviors. The Company carried out Quality Month activities in a solid manner and organized the first QC Achievement Presentation Competition. Through a combination of cultural communication and offline activities, it promoted the internalization of quality concepts and their externalization into action. At the enterprise level, it established an orientation of “building quality through lean practices and shaping brands through quality.” At the individual level, it advocated the working principle of “creating quality products with craftsmanship.”



Zhuzhou Smelter Group’s QC achievement *Reducing Auxiliary Material Costs in the Acid-making Area* won the **Gold Award, the highest honor of the International Convention on Quality Control Circles**



Zhuzhou Cemented Carbide Group won the **Nomination Award of the 5th China Quality Award**, becoming the **only** award-winning enterprise in the industry



11 quality technology innovation and practice achievements of MCC won the **“2025 Quality Technology Award of the China Association for Quality”**



Shanghai Baoye’s South China Sci-tech Innovation QC Group and China MCC5 Group’s Innovation Star QC Group won **second prizes at the 8th Central SOE Quality Control Circle Achievement Presentation Competition**



Providing Excellent Services

China Minmetals upholds the philosophy of “customer first and value co-creation.” Guided by the objectives of serving upstream and downstream enterprises in industrial chains, and empowering industry development, the Company has built an integrated service system featuring Group-level coordination and guidance and coordinated implementation by subsidiaries.

Narada Beijing Hotel Provides High-standard Services for Pakistan Mango Festival and Receives Praise from the Ambassador



In August 2025, the Embassy of Pakistan in China held the Pakistan Mango Festival at the Ministry of Agriculture and Rural Affairs. Narada Beijing Hotel served as the service provider for this foreign affairs event, undertaking such a high-standard foreign affairs task for the first time. With professional and meticulous services, the hotel received unanimous praise from the Ambassador of Pakistan to China and guests on site, demonstrating China Minmetals’ excellent service quality and responsibility as a central SOE.



Services Provided by Narada Beijing Hotel for the Pakistan Mango Festival

China Minmetals Participates in and Serves the 8th China International Import Expo



China Minmetals Booth at the 8th China International Import Expo

In November 2025, the 8th China International Import Expo, under the theme of “New Era, Shared Future,” was held at the National Exhibition and Convention Center (Shanghai). Minmetals Logistics appeared in the Services Trade Exhibition Area. Leveraging its integrated “corridor + hub + network” logistics system, it enables visibility and control across the entire logistics process, providing solid logistics support for mining operations and key projects at home and abroad. MCC Baosteel has provided landscape improvement services around the CIIE venue for eight consecutive years. For this expo, it supplied 4,000 square meters of steel slag prefabricated permeable bricks, bringing the cumulative paved area to more than 1 million square meters. Made from steel slag tailings and supported by patents and national standards, the eco-friendly bricks practice the concept of solid waste recycling and support green urban development. With professional services, MCC Baosteel Technology empowered the CIIE and demonstrated the excellent service capabilities and responsibility of a central SOE.

3 Promoting More Robust Development through Continuous Improvement in Standardized Governance

Improving the modern enterprise system with Chinese characteristics is a fundamental guarantee for achieving high-quality development. China Minmetals continuously modernized its governance system and governance capabilities, and successfully completed all tasks under the initiative to deepen and upgrade SOE reform and the action to benchmark against world-class enterprises for value creation. Through first-class governance, it has strengthened the foundation for building a world-class enterprise.

- Improving corporate governance
- Deepening reform across the board
- Governing the enterprise by law and operating in compliance



Improving Corporate Governance

China Minmetals continued to improve the modern corporate governance mechanism for state-owned enterprises with Chinese characteristics. It advanced the building and standardized operation of boards at all levels, gave full play to the boards' role as the main body for business decision-making, optimized and standardized the work system for building boards of subsidiaries, strengthened the management of external directors, and improved directors' performance of duties and supporting mechanisms, continuously enhancing the overall effectiveness of corporate governance.

Optimizing the Governance System

China Minmetals endeavors to develop a modern governance system characterized by statutorily defined powers, compliant procedures, legitimate content and robust oversight. It deepened organizational reform, optimized the headquarters decision-making list and subsidiary authorization, standardized decision-making processes, implemented differentiated management and control, improved decision-making efficiency, and improved the institutional management system. These efforts further streamlined the management and control chain and strengthened institutional and mechanism support for the Company's high-quality development.



Organizational Reform

Reviewing the core functions of the headquarters and advancing headquarters institutional reform, reducing the number of headquarters departments by 13.3% and staffing quotas by nearly 20%; standardizing the management of organizational structures at directly managed enterprises and completing the approval or filing of organizational adjustments for 16 directly managed enterprises; establishing Northwest Regional Headquarters and Latin America Regional Headquarters and exploring a new model of "vertical information management + regional supervision"; and efficiently establishing the National Innovation Center company as a substantive entity and optimizing its governance structure.



Optimizing the Headquarters Decision-making List

Systematically optimizing the headquarters decision-making list around the objectives of preventing repeated decision-making, standardizing meeting management, simplifying approval processes, and improving decision-making efficiency, while promoting the dynamic improvement of the "three lists and one process" system among subsidiaries. In 2025, 63 new decision-making items were added at the Group headquarters, 41 items were removed, and 67 items were optimized or adjusted.



Optimizing Subsidiary Authorization

Comprehensively optimizing authorization for subsidiaries, increasing authorization and delegation for core responsibilities and primary businesses, and strengthening penetrating supervision over major and high-risk businesses; further enhancing differentiated management and control based on the "risk baseline + conditional management" authorization and delegation model and according to the characteristics of industries and enterprises in mining development, metallurgical construction, sci-tech innovation, finance and real estate, and other sectors. After the adjustment, 15 core management and control items related to authorization and delegation were added, 11 were removed, and 14 were substantively optimized.



Optimizing the Institutional Management System

Advancing functional iteration of the institutional management system, issuing the *Implementation Plan for Deepening Institutional System Development* and Management, strengthening the full life-cycle management mechanism for institutions policies. In 2025, the Company formulated 22 new policies, revised 49 policies, and abolished 10 policies.



Advancing Supervisory Board Reform

Issuing the Implementation Plan for Deepening Supervisory Board Reform among Subsidiaries and establishing working mechanisms such as monthly tracking and coordination, routine assessment, and targeted breakthroughs. By the end of 2025, 938 domestic subsidiaries of China Minmetals had completed supervisory board reform, representing a completion rate of 98.95%.



Reducing Legal Entity Tiers

Formulating a work plan for reducing legal entity tiers and compressing the Group's legal entity structure to nine tiers, further streamlining the management and control system.

Standardizing Board Building

Focusing the standardized, professional, and efficient development of boards of subsidiaries, the Company systematically improved the governance capabilities and operating efficiency of subsidiaries through a four-pronged approach of building models, establishing systems, strengthening management, and transforming models, providing solid governance support for the Group’s high-quality development.

Building Models

Establishing three models for evaluating whether subsidiaries should establish boards, setting board seats, and matching external director candidates; dynamically optimizing the list of enterprises required to establish boards and their seat arrangements; improving personnel structures; and adjusting and supplementing nine external director seats at directly managed enterprises to enhance the scientific design and suitability of board arrangements.

Establishing Systems

Revising the *Measures for the Management of Subsidiary Boards of Directors* and the *Measures for the Management of Dispatched External Directors*; newly formulating the *Measures for the Management of Proposals to Shareholders’ Meetings and Boards of Directors of Subsidiaries*; compiling the *Manual for Subsidiary Board Work Archives*, the *Manual for Subsidiary Board Building and Operation*, and the *Manual for External Directors’ Performance of Duties*; and continuously deepening the work system for subsidiary board building.

Strengthening Management

Integrating management functions, optimizing the number of enterprises required to establish boards to 83, and directly assigning external directors to key subsidiaries in batches; dispatching 20 full-time and part-time external directors to the first batch of 13 key subsidiaries, holding 23 board seats; convening special advancement meetings, conducting duty performance training and assessment, and promoting the development of a sound board culture.

Transforming Models

Newly formulating the *Measures for the Management of Proposals to Shareholders’ Meetings and Boards of Directors of Subsidiaries*, giving full play to the professionalism and independence of directors dispatched by the Group, and promoting the transformation of business decision-making from “administrative-style management” to “governance-based management and control.”



China Minmetals Special Advancement Meeting on Further Implementing the Initiative to Deepen and Upgrade Reform and Strengthen Board Building among Subsidiaries

Deepening Reform across the Board

Reform of state-owned assets and SOEs is an important part of economic system reform and a key move for making state-owned enterprises and state-owned capital stronger, better, and bigger. China Minmetals has advanced the initiative to deepen and upgrade SOE reform in a systematic, integrated, and in-depth manner.

Reform Results in 2025

Receiving an A rating in the SOE reform assessment organized by SASAC for the fourth consecutive year

adding six subsidiaries selected as national manufacturing single-item champions

adding six subsidiaries to the national list of specialized and sophisticated “little giant” enterprises

in SASAC’s special assessment of “Sci-Tech Reform Enterprises” and “Double Hundred Enterprises”

Ranking 14th among central SOEs

with 4 enterprises rated as Benchmark

5 as Excellent

4 as Good

Successfully applied for SASAC’s 2025 “Open Bidding for Tackling Key Problems” research topics: *Research on Ideas and Measures for Deepening Reform of State-owned Capital Investment Companies* and *Analysis of China’s Strengths and Weaknesses in Key Mineral Resources under the New Situation and Countermeasure Suggestions for Central SOEs*, with relevant research achievements rated as an outstanding research project under SASAC’s 2025 “open competition” research program.

Promoting Specialized Integration

China Minmetals promoted a series of major asset restructurings, optimized and integrated business layouts in areas such as real estate and resource development, strengthened management and coordination in key business areas, and improved specialized management capabilities. The Company strengthened the management of listed companies. Through optimized resource allocation and asset structure arrangements, its industrial layout became clearer and its core responsibilities and primary businesses became more prominent.

Focusing on Benchmarking and Improvement

China Minmetals has always adhered to a problem-oriented approach, identified weaknesses and shortcomings, and effectively advanced improvement work from the dimensions of causes, measures, implementation, evaluation, and results. These efforts have effectively promoted penetrating supervision and enhanced the reform capabilities of primary-level enterprises. The Company researched and formulated the *Indicator System for Improving and Enhancing China Minmetals’ Development into a World-class Enterprise (2025 Edition)*. As the leading enterprise in the mining industry, China Minmetals assisted SASAC in researching and developing an evaluation indicator system for world-class enterprises in the mining industry.

Deepening Digital and Intelligent Empowerment

Using the “digital enterprise brain” as a key lever and guided by business needs, China Minmetals optimized the blueprint design for its “digital enterprise brain” and built a “5+1+N” enterprise governance platform system. The Company accelerated the Group’s “AI+” special action, prepared the special action work plan, carried out special research on production line intelligence, and launched Mobile Minmetals (MinLink), empowering the modernization of the corporate governance system and industrial system. China Minmetals advanced the development of unified systems through a digital breakthrough campaign, fully supporting an intelligent penetrating supervision system. It formed task forces in 10 key areas and made every effort to advance the development of unified systems. The Company carried out a tiered cultivation initiative for smart factories, promoting the transformation and development of traditional industries toward high-end, intelligent, and green development. One enterprise was rated as an advanced-level smart factory, and 10 enterprises were rated as basic-level smart factories. At the same time, China Minmetals carried out solid work in cybersecurity and data security, organizing enterprises at all levels to sign 1,045 commitment letters and firmly safeguarding the security bottom line.

1 enterprise
was rated as an advanced-level smart factory

10 enterprises
were rated as basic-level smart factories



China Minmetals Digital Enterprise Brain



Launch Ceremony for China Minmetals' Guangshi Mine Safety Large Model

Demonstration Outcomes of China Minmetals' Top 10 AI Application Scenarios

AI vision-based automation in sawing areas

CERI

AI + intelligent steel structure manufacturing

Shanghai Baoye

Large model-based intelligent investment banking system

Minmetals Securities

Key intelligent technologies and applications for zinc electrolysis

Zhuzhou Smelter Group

Digital and intelligent operation and maintenance system for sintering machine pallets

Zhongye Changtian

Converter flame recognition application based on machine vision

CISDI

Blast furnace condition diagnosis based on DeepSeek

WISDRI

Centrifuge efficiency analysis and AI predictive soft-sensing model

Salt Lake Industry

Intelligent unmanned loading, haulage, lifting, and dumping system for underground mines

Changsha Institute of Mining Research

Intelligent grinding system

Changsha Research Institute of Mining and Metallurgy

Driving Upgrades through Digital Intelligence and Empowering Development through Technological Innovation

Changsha Institute of Mining Research Co., Ltd. actively explored the deep integration of mining technologies, mine data and information, and digital and intelligent technologies. It built the Shizhuyuan Intelligent Control Center to monitor in real time the operation of mine production, equipment, safety, environmental protection, and other processes. The center enables intelligent management across the entire process from mining and transportation to mineral processing, supporting the development of China Minmetals' digital and intelligent mining platform.



Shizhuyuan Intelligent Control Center Built by Changsha Institute of Mining Research

China MCC22 Group Builds an Unmanned Intelligent Production Line for Steel Structures

The Steel Structure Intelligent Manufacturing Research Institute of China MCC22 Group successfully developed China's first fully autonomous and controllable unmanned intelligent production line. With its self-developed “smart brain” control center, the production line enables one-click task release, real-time monitoring, and visualized management and control across the entire process. The institute independently developed China's first steel structure detailing software with fully independent intellectual property rights, applied intelligent cutting robots and intelligent assembly robots, and innovatively developed an AI welding large model. This gives welding robots adaptive learning capabilities and enables them to overcome welding challenges for irregular components. These efforts have built a new paradigm for intelligent steel structure manufacturing and provided a replicable solution for the industry's digital transformation.



Intelligent H-beam Production Line

Governing the Enterprise by Law and Operating in Compliance

China Minmetals has further advanced compliance management and optimized a full-chain compliance risk management and control system covering pre-event, in-process, and post-event stages. The Company strengthened service support for major project advancement, major case management, and major risk response and disposal, continuously improving its capability to govern the enterprise by law and operate in compliance. With the “four mechanisms” as a key lever, China Minmetals has continuously optimized full life-cycle risk management, improved the top-level design of risk management, strictly upheld the bottom line for major risk prevention and control, and strengthened the foundation for safe development.

Improving Compliance Management

China Minmetals has continuously strengthened rule of law and compliance development, advanced the “Year of Management Standardization” initiative, improved the institutional and regulatory system, comprehensively optimized the internal control management mechanism, and built a solid barrier for compliant operations and risk prevention and control.



Ensuring Legal Review

Strengthening legal compliance and risk review for the formulation of rules and regulations, decision-making on major matters, signing of important contracts, and investment in major projects; implementing a cross-departmental compliance review mechanism; and ensuring that all processes are conducted in accordance with laws and regulations with controllable risks.



Focusing on Compliance Risks in Key Areas

Conducting monthly penetrating monitoring of newly added administrative penalties among enterprises at all levels, strengthening risk monitoring, early warning, and response management for directly managed enterprises; focusing on the prevention of overseas legal and compliance risks and strengthening research on mining-related legal and compliance risks in key countries; and strengthening guidance on compliance incidents in key areas to ensure effective implementation of compliance requirements.



Deepening Contract Management

Carrying out a special campaign to deepen contract standardization, preparing and issuing the *Compilation of Standard Contract Templates of the Group Company 1.0*, covering seven categories and 78 standard contract templates; organizing the development of a contract management system; and promoting the deep integration of contract management and business management.



Establishing a Regular Legal Learning Mechanism

Building a vertically coordinated and fully covered system for learning and applying laws. The headquarters established a “three-meeting” legal learning mechanism, with leading officials taking the lead in implementing legal learning plans and completing 25 legal learning sessions throughout the year. Affiliated enterprises focused on business-oriented legal learning, deeply integrating law with business and completing over 3,000 legal learning sessions throughout the year. Relying on the intranet, the Company launched the “Rule of Law Minmetals” column to build a shared platform for legal education resources and continuously improve the level of governing the enterprise by law.

Strengthening Risk Prevention and Control

China Minmetals has continued to deepen the development of mechanisms for risk analysis and judgment, decision-making risk assessment, risk prevention and control coordination, and risk prevention and control accountability. It has improved closed-loop management across the full process of risk identification, assessment, early warning, disposal, and review. The Company issued a series of institutional documents, including the *Work Plan of China Minmetals for Implementing the Four Mechanisms for Risk Prevention and Control*, establishing a risk management system with clear hierarchy and comprehensive coverage.

Focusing on Major Risk Management and Control

Establishing and improving a quarterly monitoring mechanism for major risks, regularly reviewing and dynamically tracking major risk management progress and reporting to the Board of Directors; accurately analyzing major risk monitoring data of the Group on a quarterly basis and submitting reports to SASAC in a timely manner; organizing major risk coordination meetings to make overall arrangements for prevention, control, and mitigation strategies, thereby strengthening the safety bottom line for robust operations.

Resolving Risks in Key Areas

Focusing on key areas such as safety and environmental protection, debt and funds, overseas operations, real estate businesses, and PPP and investment-financing-construction business; promoting risk management to shift from passive post-event disposal to pre-event prevention and in-process control; and steadily advancing risk resolution plans in key areas to address risk mitigation at the root in a systematic and integrated manner.

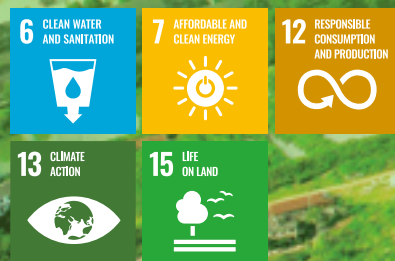
Strengthening Overseas Risk Response

Improving the overseas operation management and control system, strengthening control over key links such as investment decision-making, project operations, and risk management; building an emergency command system for overseas personnel safety; establishing a daily risk reporting mechanism; carrying out in-depth special rectification; continuously improving overseas compliant operation capabilities; and strengthening the development of foreign-related legal talent teams and staffing of overseas legal institutions.

4 Pursuing More Sustainable Development by Strengthening Ecological and Safety Barriers

Safety is the ballast of development, and green development is the compass for progress. China Minmetals has strengthened its safety and environmental management system with systematic thinking, consolidated safety responsibilities for all employees with bottom-line thinking, proactively addressed climate change with a future-oriented vision, deepened green production methods with ecological awareness, and advocated low-carbon operations with lean management. The Company has continuously pursued synergy between high-level safety and green, low-carbon development.

- Strengthening safety and environmental management
- Implementing safety responsibilities
- Addressing climate change
- Practicing green production
- Conducting green operations



Strengthening Safety and Environmental Management

The Company has advanced institutional restructuring and penetrating accountability in parallel, and promoted both strengthened supervision and professional empowerment. It has built a new pattern of safety and environmental management covering all employees, the entire process, and overseas operations.

In 2025, the Company achieved:

Dual declines in both the number of work safety incidents and the number of fatalities

with **no** major or more serious work safety incidents

Dual declines in the number of general work safety liability incidents and fatalities, down **11.1%** and **10%** year on year, respectively

30.77% year-on-year decrease in the number of environmental administrative penalties

Improving the Safety and Environmental Management System

The Company regards institutional development as the foundation of safety and environmental management. It systematically revised core policies and simultaneously developed supporting management and control points and operating guidelines. Through simplified and process-based institutional arrangements, it has provided unified guidance for safety and environmental management across the Company.

Improving Policies

Formulating and revising six policies, including the *Measures for the Management of the Work Safety Responsibility System*, the *Measures for Work Safety Management*, the *Measures for the Management of Work Safety Incident Hazard Identification and Rectification*, the *Measures for Comprehensive Evaluation of Ecological Environment Protection*, the *Measures for the Management of the Responsibility System for Energy Conservation and Ecological Environment Protection*, and the *Measures for Green Development Evaluation*; and preparing corresponding policy control points to institutionalize management, proceduralize institutions, simplify processes, and strengthen the management foundation.

Strengthening Reflection and Warning

Establishing an upgraded interview and reflection mechanism for the principal persons in charge of units where incidents occur; strictly implementing the *Implementation Rules for "Blacklist" Management of Suppliers in Work Safety*; and including suppliers involved in work safety incidents in the supply chain blacklist, thereby using institutional rigidity to drive subcontractors to improve their safety management capabilities.

Promoting Demonstration and Mutual Learning

Collecting advanced management practices, technologies, and equipment for work safety and environmental protection from directly managed enterprises and their subsidiaries; preparing and issuing the *Catalogue for Promoting Advanced Safety Management, Technologies, and Equipment* and the *Catalogue for Promoting Advanced Environmental Protection Management, Technologies, and Equipment*; and promoting mutual learning and application of excellent management experience and advanced technologies and equipment across all units.

Strengthening Dynamic Reporting

Guiding and supervising enterprises to submit monthly reports through the online collection module for environmental administrative penalties, enabling timely tracking and follow-up of environmental administrative penalties as well as internal accountability and liability investigation actions.

Deepening Supervision and Inspection

Using the "Thunder Action" safety inspection campaign as a key lever, the Company broke away from conventional inspection models and extended supervision to high-risk enterprises and remote projects at home and abroad. Through a combination of unannounced on-site inspections, cross-inspections, and video inspections, it achieved accurate identification of risks and hazards and closed-loop rectification.

Implementing Supervision and Inspection	Dynamically Eliminating Hazards	Improving Reward and Accountability Mechanisms	Conducting Follow-up Review of Environmental Protection Inspection Rectification
Achieving full coverage of inspections of domestic mines; conducting on-site inspections of overseas mines such as MCC Ramu and the Dugald River Lead-Zinc Mine under China Minmetals Nonferrous Metals; conducting video inspections of overseas mines such as Kinsevere Mine under China Minmetals Nonferrous Metals; launching the "Thunder Action" work safety inspection campaign; dispatching 22 inspection teams to identify 4,317 problems and hazards of various types, all of which had been fully rectified.	Updating and issuing the <i>Compilation of Criteria for Determining Major Accident Hazards and Interpretations</i> , establishing and improving a database of major accident hazards, and promoting item-by-item rectification and closure. In 2025, enterprises at all levels identified 472 major accident hazards, including 356 in the construction sector. Dynamic clearance was achieved, effectively improving accident prevention capacity and the level of hazard identification and rectification.	Formulating the <i>Measures for the Management of Work Safety Incident Hazard Identification and Rectification</i> , establishing three mechanisms for rewards for hazard reporting, accountability for ineffective rectification, and retrospective investigation of major hazards; encouraging all employees to participate in hazard identification and rectification; and requiring enterprises at all levels to conscientiously implement the reward mechanism for accident hazard reporting.	Carrying out a follow-up review of rectification related to the central ecological and environmental protection inspection; forming seven expert groups to conduct supervision and spot checks on 10 headquarters departments and 23 production enterprises under eight directly managed enterprises; identifying 180 problems of various types.

China Minmetals' Metals and Minerals Enterprises Deepen Safety Management Exchange and Integration through the Work Safety Month Campaign



During the 24th National Work Safety Month campaign, China Minmetals closely followed the theme of "Everyone Promotes Safety Awareness, Everyone Can Handle Emergencies—Investigate Hidden Safety Hazards Around You" and coordinated metals and minerals enterprises at home and abroad to carry out multi-level safety practices. Overseas enterprises advanced localized operations. Minmetals Resources held a safety leadership workshop in Australia to deploy key mining tasks. Mines such as Las Bambas strengthened prevention and control through signature commitments, contractor management improvement, vehicle risk workshops, and emergency drills. MCC Ramu focused on frontline operations by carrying out pre-job training, special inspections of lifting equipment, and evacuation drills to ensure the implementation of safety measures. Domestic enterprises emphasized integrated communication, education, and local coordination. Anhui Development Mining innovated the "family support for safety" model, building a psychological line of defense through family reminders. Hunan Nonferrous Metals jointly held a launch ceremony with the Loudi Municipal Government and conducted a practical underground fire drill at Hsikwangshan. China Tungsten and Hightech hosted the Group's on-site meeting on mine safety and organized underground explosion-proof and fire prevention drills for explosives, building an internal platform for experience sharing.



Work Safety Inspection Conducted at Las Bambas Mine



Carrying Out the Work Safety Month Campaign

Strengthening Risk Prevention and Control

The Company focused on source control of safety and environmental risks, with emphasis on the prevention and control of major risks in key areas such as mines, construction, and hazardous chemicals. It standardized operation management and identified disaster-causing factors. China Minmetals continued to deepen the special campaign to prevent falls from height. Through strengthened communication, training, and penalties, the number of fall-from-height incidents decreased by 66.7% year on year. It also carried out regular special governance of environmental administrative penalties, maintained high-pressure management and control, deepened the enforcement of safety “iron rules,” strengthened on-site safety supervision, and comprehensively prevented various safety and environmental risks, including underground safety risks, pollutant discharge risks, and geological disasters.



Mining Enterprises

Implementing the requirements of the General Office of the CPC Central Committee and the General Office of the State Council, carrying out in-depth surveys and treatment of hidden disaster-causing factors in mines, and promoting a dual approach covering in-house mining and stripping construction teams and overall entrusted management.



Construction Enterprises

Continuously strengthening management and control over high-risk sub-projects such as foundation pit works and underground excavation works, as well as high-risk operations such as hot work and work at height.



Hazardous Chemicals, Smelting and Processing, and Other Enterprises

Continuously strengthening safety management and control over key regulated hazardous chemicals, key regulated hazardous chemical processes, and major hazard installations, as well as special equipment and building fire protection, to ensure that all risks are controlled and manageable.



Industrial and Trading Enterprises

Actively accelerating the improvement of intrinsic safety, and strengthening confirmation of safety conditions and implementation of control measures for gas operations and confined space operations.

Enhancing Emergency Response Capability

The Company has always regarded emergency management as an important line of defense for work safety. By improving emergency management mechanisms, strengthening all-time response and risk early warning, building emergency management systems, enabling visualized management and efficient allocation of emergency resources, and organizing regular emergency drills, China Minmetals has continuously optimized emergency plans and strengthened practical response capabilities. Through these all-round efforts, the Company has built an efficient, coordinated, and resilient emergency management system.

In 2025, an emergency rescue simulation teaching video produced by Minmetals Development was selected for the national outstanding science education video exhibition by the Publicity and Education Center of the Ministry of Emergency Management. China Salt Lake's National Hazardous Chemicals Emergency Rescue Qinghai Salt Lake Team, China MCC17 Group, China MCC22 Group, Luzhong Mining, Shanghai Baoye, MCC Real Estate, and other units withstood major tests in emergency response practices such as flood control and rescue and earthquake relief, receiving written commendations from SASAC, the CPC Gansu Provincial Committee, the Gansu Provincial People's Government, and other authorities.

Improving Emergency Management Mechanisms

Improving the 24-hour emergency duty system, establishing an emergency coordination and early warning mechanism, and strengthening early warning and reminders for natural disaster risks.

In 2025

the Company forwarded

48

special reports on major meteorological information

issued

110

early warnings on typhoons, geological disasters, and other risks to subsidiaries

coordinated more than

1,000

enterprises and projects

relocated more than

10,000

people during the flood season, and recorded no casualties during the flood season

Building an Emergency Management System

Launching the China Minmetals emergency management information collection system

entering
55

emergency material warehouses

more than
610,000

sets of emergency equipment and supplies

569

emergency rescue teams

and
439

emergency response experts into the system

and enabling “one-map” visualization of resources and agile allocation to the nearest available resources.

Organizing Emergency Drills

Promoting regular emergency drills and emergency plan optimization.

In 2025

the Company organized

23,909

emergency drills

and revised emergency plans

15,274 times

continuously improving practical response capabilities



Flood Control and Disaster Relief Site

Implementing Safety Responsibilities

The Company has worked to extend safety accountability through all levels, from the “first mile” of principal leaders to the “last mile” of frontline employees at the grassroots level. It has organically integrated risk identification, hazard rectification, and technological empowerment, building a full-chain and three-dimensional safety prevention and control system to safeguard high-quality development in work safety.

Strengthening Safety through Technology

The Company steadily advanced safety improvement and the initiative of strengthening safety through technology. It released the *Catalogue for Promoting Advanced Safety Management, Technologies, and Equipment*, coordinated enterprises at all levels in eliminating and upgrading outdated equipment and facilities, and throughout the year eliminated or upgraded more than 3,000 sets of safety equipment and updated more than 80 process methods. China Minmetals promoted upgrades featuring replacing manual work with mechanization, reducing manpower with automation, and enabling unmanned operations through intelligent technologies, and accelerated the development of smart mines, smart construction sites, and smart factories. It coordinated the development of a safety supervision platform and improved the dual prevention mechanism as well as management and control systems for tailings ponds and high-risk sub-projects, achieving simultaneous improvement in intrinsic safety and production efficiency.

Strengthening Safety through Technology

- 13 subsidiaries of MCC won the Science and Technology Progress Award under the “Safety Science and Technology Award” of the China Association of Work Safety
- MCC comprehensively advanced remote monitoring and dynamic early warning for high-risk sub-projects and deepened the application of smart safety platform functions
- Hunan Nonferrous Metals’ Shizhuyuan Company and China Tungsten and Hightech’s Xintianling Tungsten were recognized as among the first batch of intelligent demonstration mines in Hunan Province
- Hunan Nonferrous Metals, Minmetals Mining, China Tungsten and Hightech, and Minmetals Exploration & Development vigorously promoted the application of advanced equipment and systems such as drill jumbos and remote-control systems
- Anhui Development Mining and Yunshan Graphite continued to actively apply intelligent mine data integration and sharing, AI video intelligent monitoring systems, remote mining control, belt inspection robot projects, remote-controlled electric load-haul-dump machines, and automated medium- and deep-hole drilling jumbos
- Minmetals Salt Lake and Qinghai Huixin built intelligent management and control platforms
- Zhuzhou Cemented Carbide Cutting Tools implemented “5G + industrial Internet” application scenarios

Minmetals Mining Successfully Tests Autonomous Underground Drone Scanning of Mined-out Areas

In March 2025, Minmetals Mining successfully carried out a test of autonomous drone flight and scanning technology for underground mined-out areas at Anhui Development Mining, achieving the expected results. During the test, the drone carried an advanced three-dimensional scanning system and took off with one click several hundred meters underground. Based on the preset area, it autonomously planned its flight route, navigated independently, conducted fully autonomous three-dimensional scanning, and perceived and avoided obstacles in real time. The technology overcame multiple limitations in current underground surveying, including the absence of GPS signals, low 5G communication coverage, and complex operating environments, providing an intelligent solution for the management of mined-out areas in mines.



Las Bambas Copper Mine advanced smart mine development through the integrated approach of “connectivity, digitalization, and intelligence,” achieving comprehensive improvement in safety, efficiency, and benefits.

Cultivating a Safety Culture

The Company actively strengthened standards and guidance by preparing and issuing the *Standardized Atlas for Safe and Civilized Production in Underground Mines* and the *Standardized Atlas for Safe and Civilized Construction in Building Projects*, thereby standardizing on-site management in high-risk industries. It organized specialized training for principal persons in charge of enterprises, held on-site meetings on mine safety management for six consecutive years, invited SASAC experts to deliver training, and built a platform for exchanging management practices. The Company also improved its safety culture system and issued the *Guidelines for Safety Culture Development*, comprehensively strengthening the foundation of work safety.

Chentaigou Mining Completes and Launches an MR Safety Training Experience Room



In July 2025, Chentaigou Mining completed and officially launched its mixed reality (MR) safety training experience room, which will further enhance the safety awareness and emergency response capabilities of mine workers. Led by Chentaigou Mining, the MR safety training experience room uses MR technology, virtual reality simulation, and various environmental special effects to provide users with an immersive accident experience and learning environment. Wearing simulation helmets inside the experience cabin, users can intuitively experience the processes of various mine accidents while learning how to effectively prevent and respond to such incidents. The safety training covers four experience modules: preparation before entering the mine, roof fall and rib spalling, falls from height, and electric shock and rescue. Employees have participated in training sessions in batches, receiving positive feedback.



MR Safety Training Experience Room of Chentaigou Mining

Addressing Climate Change

The Company actively responds to China’s Carbon Peaking and Carbon Neutrality Goals. It has incorporated carbon peaking and carbon neutrality into the overall framework of corporate development, improved systems and mechanisms, innovated low-carbon technologies, optimized its energy structure, steadily advanced low-carbon transition, and actively participated in global climate governance.

Governance

The Company continued to optimize its governance system for addressing climate change. It established a Leading Group for Ecological Environment Protection and Carbon Peaking and Carbon Neutrality,, headed by the principal leader, with the deputy general manager in charge serving as deputy head and principal responsible persons of relevant functional departments as members. The Leading Group strengthened overall planning and unified leadership for work related to the Carbon Peaking and Carbon Neutrality Goals, and convened a number of meetings to coordinate the implementation of carbon peaking initiatives. The Company also established a Green and Low-carbon Work Office to provide organizational support for implementing carbon peaking, thereby building a sound top-down mechanism for advancing green development.

In 2025, China Minmetals engaged an authoritative institution to conduct its first full-scope and full-coverage carbon inventory across all domestic enterprises of the Group. The inventory accurately identified major emission sources and resulted in the *China Minmetals Greenhouse Gas Inventory Report*. The Company also deepened green development evaluation by issuing the *Measures for Green Development Evaluation of China Minmetals Corporation*, building a green development evaluation system covering the full business chain. It organized directly managed enterprises to conduct the first trial evaluation of green development, assessing their current green development status and identifying weaknesses and areas for improvement.

Strategy

Climate-related risk To enhance resilience in addressing climate change and control climate-related risks, China Minmetals has fully identified climate-related risks and potential impacts, and developed response measures for each risk and potential impact.

Risk Category	Risk Description and Potential Impact	Response Measures
Physical Risks	Acute Risks - Increased frequency of natural disasters such as storms, floods, and earthquakes caused by climate change may damage infrastructure and production facilities, leading to disruptions in production and operations, affecting supply chains and market supply, and causing economic losses - Extreme weather may also pose threats to employee safety and health, causing accidental injuries	- Closely monitoring weather forecasts and early warning information in daily operations, keeping track of the dynamics and affected areas of typhoons, floods, and other natural disasters, and carrying out real-time monitoring and early warning - Strengthening production and infrastructure facilities against disasters to improve their resistance to earthquakes, floods, and strong winds - Establishing emergency warning systems, strengthening employee safety awareness training, regularly conducting emergency drills, and providing necessary safety training and equipment
	Chronic risk Long-term climate changes such as sea level rise, continuous increases in annual average temperature, and changes in precipitation patterns may affect resource development layout and the stability of production systems	Keeping up to date with and complying with relevant regulatory laws and regulations, and standardizing working mechanisms for all businesses in accordance with regulatory requirements

Risk Category	Risk Description and Potential Impact	Response Measures
Transformation risks	Policy As global attention to climate change increases, governments around the world have introduced policies and regulations to address climate change. Policy changes such as carbon pricing mechanisms and carbon emission restrictions may have significant impacts on enterprise production and operations	- Continuing to phase out outdated capacity, upgrade process technologies, carry out electrification upgrades, and implement energy-saving, carbon-reduction, and efficiency-improvement actions - Optimizing and expanding process flows, and strengthening resource conservation and efficient utilization - Strengthening green and low-carbon sci-tech innovation and tackling critical and core technologies
	Technology - Traditional mining and smelting models characterized by high energy consumption and significant ecological and environmental impacts face an urgent requirements for technological transformation and upgrading - Enterprises need to continue investing in R&D and adopt new technologies and processes to reduce carbon emissions	- Promoting mature low-carbon and energy-saving technologies - Deepening low-carbon building solutions and developing green buildings - Building a green finance business system based on a full financial license layout and providing various forms of green financial services - Providing green and smart transportation services to internal and external customers - Implementing green procurement and giving priority to energy-saving, water-saving, and material-saving raw materials and services
	Market Investors and customers are paying increasing attention to enterprises’ carbon emissions and sustainability capabilities, leading to greater market demand for low-carbon and environmentally friendly products and reduced demand for high-carbon and high-pollution products, thereby affecting enterprises’ market competitiveness	- Actively exploring international research, standards cooperation, and technical exchanges in the Carbon Peaking and Carbon Neutrality fields - Increasing ecological and environmental protection services and support for projects along the Belt and Road
	Reputation As sustainability receives growing public attention, failure to effectively address climate change challenges may result in negative evaluations from the public and investors, affecting public image and actual revenue	- Strengthening green culture development and incorporating “green culture” into the corporate culture philosophy system and handbook - Actively responding to public and investor concerns and expectations regarding the Company’s climate actions, and strengthening information disclosure

Developing an Action Roadmap

China Minmetals formulated its *Action Plan for Carbon Peaking*, defining two strategic tasks: to position itself as a leader in green and low-carbon development within its own operations and to serve as an enabler of green and low-carbon development for the entire industry. The plan also set out China Minmetals’ implementation pathway, timetable, and roadmap for achieving carbon peaking. Annual action plans for carbon peaking are developed on a rolling basis to ensure comprehensive implementation.

Positioning Itself as a Leader in Green and Low-carbon Development within Its Own Operations

The Company has adjusted and optimized its industrial and energy structures, deepened energy conservation and carbon reduction, strengthened sci-tech innovation, systematically deployed green transformation projects, phased out high-energy-consuming equipment, and vigorously developed photovoltaics, energy storage, and green power trading. Indicators such as comprehensive energy consumption per CNY 10,000 of output value have outperformed the progress targets of the 14th Five-Year Plan period, enabling the Company to lead the industry toward green development with solid results.

Serving as an Enabler of Green and Low-carbon Development for the Entire Industry

Leveraging its full value-chain technologies and system integration advantages, China Minmetals has created diversified enabling scenarios in metallurgical construction, infrastructure construction, new energy, and other fields. It has taken the lead in formulating multiple green standards, deepened green project cooperation under the Belt and Road Initiative, built industry technology exchange platforms, and systematically exported technologies, standards, and capital. These efforts support coordinated carbon reduction across industrial chains and position the Company as a key enabler of green transformation.

	Near Term	Medium Term	Medium to Long Term	Long Term
	By 2025	2026–2030	2031–2045	2046–2060
Target	Strictly controlling the growth of total carbon dioxide emissions and laying a solid foundation for carbon peaking.	Achieving carbon emission peaking and laying a solid foundation for carbon neutrality.	Promoting steady decline in carbon emissions and achieving deep emission reduction.	Striving to achieve carbon neutrality across the Group as a whole.
Actions and Progress	Structural optimization: Vigorously developing strategic emerging industries, with their revenue share reaching 17.3% in 2025, and accelerating the phase-out of outdated capacity. Energy conservation and efficiency improvement: Implementing green transformation at key energy-consuming units, promoting advanced energy-saving technologies, reducing energy consumption per CNY 10,000 of output value by 25.8% on a comparable basis in 2025 compared with 2020, and raising the proportion of copper and zinc smelting capacity above energy efficiency benchmark levels to 100%. Technological innovation: Strengthening R&D in green and low-carbon technologies, reaching an R&D intensity of 3.03% in 2025, and forming leading advantages in fields such as new energy materials	Energy transition: Actively promoting green and energy-saving transformation, increasing the share of renewable energy such as photovoltaics, and building a number of “photovoltaics + energy storage” demonstration projects. Technological breakthroughs: Innovating, developing, promoting, and applying green and intelligent technologies for pollution and carbon reduction, and breaking away from lock-in and path dependence associated with traditional high-consumption technologies. Management upgrading: Strengthening green and low-carbon supply chain management, deepening carbon emission data monitoring, advancing carbon asset management, and ensuring full and timely completion of carbon compliance obligations.	Deep decarbonization: Tackling key technologies and challenges related to low-carbon, zero-carbon, and negative-carbon development, and promoting engineering demonstrations of frontier technologies. Deepening circular development: Advancing the development of a “zero-waste Group” and achieving efficient resource recycling throughout the full life cycle. Systematic carbon sink enhancement: Consolidating and enhancing ecosystem carbon sink capacity in self-owned mining areas, and exploring mechanisms for realizing the value of ecological products.	Technology integration: Applying deep decarbonization technologies on a large scale and promoting core processes to move toward near-zero carbon emissions. Ecological contribution: Further strengthening ecosystem carbon sink capacity to offset unavoidable residual emissions. Continuous innovation: Maintaining green technology iteration and contributing Minmetals solutions to carbon neutrality across society.

Impact, Risk, and Opportunity Management

Innovating Low-carbon Technologies

The Company focused on green and low-carbon technology innovation and strengthened industry-university-research collaboration. A number of internationally leading low-carbon technologies have moved from the laboratory to engineering application.

Minmetals New Energy Materials Showcases Green Supply Chain Innovation at the United Nations Climate Change Conference COP30

The case of Minmetals New Energy Materials, “Innovative Practice in Recycling Used Power Batteries,” became a benchmark example of green transformation for the Group for its high level of innovation, demonstrative value, and replicability. As an excellent practice by a central SOE, the case was presented at the China Pavilion of the United Nations Climate Change Conference (COP30) and included among the Top 10 Cases in the *Green and Low-carbon Supply Chain Development Report of Central SOEs (2025)*. It showcased China Minmetals’ advanced experience in green and low-carbon development to the world and enhanced the enterprise’s brand image and influence on the international stage.



Minmetals New Energy Materials’ Green Supply Chain Innovation Showcased at the United Nations Climate Change Conference COP30 in November 2025

China ENFI Builds a New Paradigm for Waste-to-energy “Lights-out Factories”

China ENFI Engineering Corporation used the Ganzhou and Gu’an waste incineration plants as application scenarios and successfully built fully intelligent “lights-out factories” through the “open competition” special action. Relying on its self-developed MIM + industrial Internet platform, the project achieved full-process digital labeling of waste from entry to disposal, transforming physical waste into data assets that can be optimized and controlled. By building a full-process intelligent management and control system, the project achieved reliable operation with an automatic input rate of over 95% and an increase of more than 15% in the stability of main parameters. The flue gas purification system achieved a 100% emission compliance rate, reduced the consumption of environmental protection reagents by more than 10%, and generated more than 3 million additional kWh of electricity annually through technologies such as intelligent optimization of steam turbines. The project has formed a replicable and scalable system solution and has been successfully applied in nearly 10 enterprises. It was also featured on the Xuexi Qiangguo platform, providing a benchmark model for the digital and green transformation of traditional process industries and demonstrating significant replicability.



Application of China ENFI’s “Lights-out Factory” Technology at Ganzhou ENFI

Optimizing the Energy Structure

The Company implemented energy-saving and carbon-reduction actions, vigorously promoted process and equipment upgrades at key enterprises, and phased out outdated production processes, technologies, and equipment. It gradually increased the share of new energy such as photovoltaics in energy supply, actively participated in green power market trading, and developed replicable low-carbon energy solutions.

Minmetals New Energy Materials Builds an 11.5 MW Distributed Photovoltaic Power Station



Changyuan Lico High-Tech Base Recognized as a National Green Factory

Minmetals New Energy Materials used idle rooftop resources at its High-tech Base to build an 11.5 MW distributed photovoltaic power station in two phases. The project has created a clean energy operation model featuring “self-generation and self-consumption, with surplus power fed into the grid.” The power station provides an average of 9.77 million kWh of green electricity per year and reduces carbon emissions by 5,136 tons annually. It has formed a replicable model for rooftop photovoltaic development at central SOE plants and provides an integrated solution for coordinated carbon reduction across industrial chains.

Shen Kan Engineering & Technology Corporation, MCC Develops and Utilizes Medium-Deep Geothermal Energy



Development and Utilization of Medium-Deep Geothermal Energy by Shen Kan Engineering & Technology Corporation, MCC

Shen Kan Engineering & Technology Corporation, MCC has realized full-process management and implementation for the design, heat exchange testing, and drilling of medium-deep geothermal heating through technologies such as coaxial heat exchange wells that “extract heat without extracting water” and staged heat extraction. In the field of deep metal mines, the company has developed an integrated “mine-heat-storage” research system and used green and clean energy for heating. It has continued to advance technological innovation and upgrading, providing technical support for the enterprise’s future low-carbon and digital transformation.

Supplying Green Products

In the construction sector, the Company promoted innovative practices such as zero-carbon buildings and proactively aligned with global green trade standards, activating new momentum for green development through new quality productive forces.

China MCC5 Group Builds a Zero-carbon Smart Landmark in Lingang



China MCC5 Shanghai Lingang Building

The China MCC5 Shanghai Lingang Building is a benchmark ultra-low-energy project integrating independent design, construction, and operation. Centered on “three-star green building + zero-energy building + zero-carbon building,” the project integrates more than 10 advanced technologies, including a photovoltaic-storage-direct current-flexibility system, a smart “breathing” curtain wall, and AI-enabled smart operation and maintenance. The project received authoritative certification from the China Association of Building Energy Efficiency. The South Building, or Tower A, was certified as a “zero-carbon building” and a “zero-energy building,” achieving a carbon reduction rate of 82.40% and an energy saving rate of 137.48%. According to calculations, the building can generate 807,000 kWh of photovoltaic power each year, save approximately 20,000 tons of water, and reduce carbon emissions by 243 tons annually, establishing a new benchmark for green and smart buildings with measured results.

Indicators and Targets

In 2025, China Minmetals’ comprehensive energy consumption per CNY 10,000 of output value on a comparable basis and under the same statistical scope¹ decreased by 6.3% year on year and by 25.8% compared with 2020, outperforming the 2025 target of 13.5%. Carbon dioxide emissions per CNY 10,000 of output value, or revenue, on a comparable basis decreased by 1.1% year on year, and decreased by 20.0% compared with 2020, exceeding the 2025 target of 18%.

Practicing Green Production

The Company remained committed to prevention first, protection as a priority, and integrated governance. It vigorously promoted green production and cleaner transformation, and advanced pollution and carbon reduction throughout the entire production process. It also actively promoted resource recycling and synergistic efficiency improvement, supported efficient resource allocation and circular regeneration, and continuously improved its level of green development through clean, low-carbon, safe, and efficient production methods.

Strengthening Pollution Prevention and Control

The Company maintained strict management and control over environmental administrative penalties. Through list-based management, it advanced key pollution prevention and control projects, strengthened the management of exhaust gas, wastewater, general solid waste discharge, noise pollution control, and hazardous waste disposal, and ensured that environmental risks are identifiable, controllable, and preventable. These efforts promoted the transformation of pollution control from “passive response” to “active prevention.”

Pollution Prevention and Control Projects

Deploying enterprises to carry out comprehensive treatment of air pollution, industrial wastewater, solid waste, and soil pollution under the *Key Work Points for Environmental Protection of the Group Company in 2025*; and providing focused supervision for 10 key pollution prevention and control projects, including advanced exhaust gas treatment at Changyuan New Energy, clean water and wastewater separation in the Yaogangxian Tungsten Mine area, and construction of a hazardous waste warehouse at Chenzhou Fluorine Chemical.

Special Inspection for Pollution Prevention and Control

Issuing the *Notice on Conducting Special Inspection of Illegal Dumping and Disposal of Solid Waste*; arranging enterprises to carry out comprehensive inspection and rectification across all links of solid waste generation, storage, transfer, and disposal; and organizing subsidiaries to conduct comprehensive inspection of environmental risks at mine tailings ponds, with no major environmental hazards identified.

Implementing Green Transformation

Issuing the *List of Green Transformation Projects of the Group Company in 2025*

organizing the implementation of	reduce carbon emissions by
80 green transformation projects	94,000 tons
expected to save	and cut various pollutant emissions by
33,000 tons of standard coal	84,000 tons annually

1: The 2020 data exclude Minmetals Yingkou Medium Plate Co., Ltd., and the 2025 data exclude the newly consolidated part of Salt Lake.

Minmetals New Energy Materials Achieves Near-zero Wastewater Discharge and Resource Utilization



Wastewater Treatment Unit at the Tongguan Base

The wastewater treatment project at the Tongguan Base of Minmetals New Energy Materials innovatively developed a treatment model featuring resource recovery, energy conservation and consumption reduction, and near-zero discharge. Through source reduction by differentiated collection and diversion, efficient concentration through integrated membrane technologies, and closed-loop ammonia resource recovery, the project reconstructed the wastewater treatment process. It converts wastewater into reusable purified water and purified ammonia water, reducing the volume of wastewater entering the evaporation stage by more than 26% and lowering the ammonia nitrogen indicator by 85.7%. The project provides a demonstration pathway for the resource utilization of industrial wastewater.

Minmetals Copper Focuses on Harmless Treatment through Technological Breakthroughs



In recent years, Minmetals Copper invested more than CNY 16 million to systematically upgrade and renovate 15 environmental protection projects, successfully converting 15,000 tons of acidic gypsum residue from hazardous waste into general solid waste. The achievement underwent eight months of testing and verification and passed expert review. It can save more than CNY 10 million in disposal costs each year, achieving the dual goals of risk reduction and efficiency improvement.



Acidic Wastewater Treatment Area of Minmetals Copper

Enhancing Resource Circularity and Efficiency

The Company continued to strengthen research and application of comprehensive processing technologies for low-grade ores, associated and co-existing minerals, and difficult-to-process ores. Through innovative beneficiation processes and the introduction of advanced smelting technologies, it has enabled resources to circulate sustainably within closed loops and strengthened the foundation of green development through circular chains.

Minmetals Mining Empowers Resource Utilization Efficiency through Technology



A number of technological research projects of Minmetals Mining achieved breakthroughs. The recovery rates of the specularite and magnetite systems at Anhui Development Mining increased by 2.37 percentage points and 4.66 percentage points year on year, respectively, adding 144,200 tons of recoverable resources. The copper recovery rate at Luzhong Mining increased by 10 percentage points. Laixin Iron Mine implemented China's first curtain grouting restoration project near an orebody, reducing average daily mine water inflow by 1,584 cubic meters year on year. The technology package of "pre-grinding preconcentration + graded sand extraction + filter-press dry discharge + ecological revegetation" was fully promoted, increasing the comprehensive utilization rate of the tailings resources by 3.54 percentage points year on year.

Hunan Nonferrous Metals Advances the Development of a "Zero-waste Group"



The copper-lead-zinc base of Hunan Nonferrous Metals advanced the development of a "zero-waste Group" through stronger collaboration. In 2025, it internally transferred approximately 338,000 tons of concentrates, valuable metal materials, and precious metal materials through collaborative arrangements, with internal collaboration amounting to CNY 4.45 billion, representing a year-on-year increase of more than 10%. All 16 types of internal collaborative materials achieved 100% internal coordination. The results of the "zero-waste Group" initiative were fully recognized by the Department of Ecology and Environment of Hunan Province and widely reported by mainstream media.

MCC Eco-Environmental Protection Converts Sludge into Composite Biochar through High-pressure Hydrothermal Coupled Incineration Technology



MCC Eco-Environmental Protection applies a high-pressure hydrothermal modification process to treat sludge generated by wastewater treatment plants in a harmless and volume-reducing manner. The process modifies sludge and enriches organic matter, while coupling incineration and mine restoration technologies to recover and utilize thermal energy. The project produces stable, harmless, and high-value composite biochar, which can be used for rapid ecological restoration of mines, enabling full resource utilization of sludge.



Resource Utilization Technology for Municipal Sludge through High-pressure Hydrothermal Coupled Incineration and Mine Restoration

Conducting Green Operations

The Company has always upheld the philosophy of prioritizing ecology and pursuing green development. It has continued to advance ecological restoration and environmental governance in mining areas, strengthened biodiversity conservation, vigorously promoted green culture, and encouraged the low-carbon philosophy to take root among employees. Through comprehensive and multi-level ecological and environmental protection practices, China Minmetals has demonstrated the responsibility and commitment of a central SOE.

Developing Green Mines

The Company continued to promote the development of green mines and encouraged subsidiaries to explore distinctive pathways such as ecological restoration using Juncao technology and subsidence area governance, restoring lucid waters and lush mountains to abandoned mine pits.

Beiminghe Iron Mine Included in the National Green Mines Directory for Six Consecutive Years



Geological Environment Restoration and Landscape Greening Enhancement Project at Beiminghe Iron Mine

In September 2025, the Department of Natural Resources of Hebei Province organized an expert group to conduct an on-site verification of national-level green mine development at Beiminghe Iron Mine. Through on-site verification and questioning, the expert group confirmed that Beiminghe Iron Mine met the national green mine construction standards in ecological restoration, resource conservation, environmental governance, sci-tech innovation, and other areas, with all indicators continuing to remain at the leading level in the industry. The mine was recognized as a national-level “green mine” for the sixth consecutive year.



Safeguarding Biodiversity

The Company supports overseas enterprises in aligning with international rules and integrating biodiversity conservation into environmental management plans. From species rescue and habitat restoration to community co-development, China Minmetals has demonstrated both the professionalism and warmth of Chinese enterprises in global ecological civilization development.

MCC Ramu Uses Juncao Technology to Create a New “Ecology + Livelihoods” Model for Overseas Mines



Juncao Planting Base

MCC Ramu introduced China’s distinctive Juncao technology and built a Juncao pilot field of more than 1,000 square meters at the KBK Mine in Papua New Guinea, with an 80% survival rate. It established a closed-loop industrial chain covering Juncao planting, mine reclamation, and mushroom cultivation. In 2025, MCC Ramu completed 500,000 square meters of reclamation. Using Juncao as a bridge, it has developed a replicable and scalable China solution for the sustainable development of the global mining industry. Going forward, MCC Ramu will continue to expand the boundaries of ecological industries, empower local livelihoods through technology, and make green development a defining feature of overseas mining.



Kinsevere Mine Advances Ecological Restoration to Build Stronger Safeguards for Biodiversity Conservation



Facing limited land resources, tight topsoil availability, and regional ecological pressure, Kinsevere Mine has adhered to ecological priority and systematically advanced ecological restoration and biodiversity conservation. The mine has strictly regulated land disturbance management, minimized operational impacts, and made every effort to address constraints on restoration. By expanding native species nurseries, it cultivated 23,200 suitable seedlings. It actively carried out scientific research co-operation and worked with the University of Lubumbashi to protect copper grass and other distinctive species through a combination of in-situ conservation and ex-situ seed banks, safeguarding germplasm resources. In areas such as waste rock dumps and tailings ponds, the mine established ecological restoration pilot zones to optimize restoration plans through scientific experiments. These efforts have continuously improved ecological management and protection and promoted coordinated progress between ecological conservation and mining area development.



Tree Seedling Planting at Kinsevere Mine

Promoting Green Culture

The Company has integrated the philosophy of green development into the entire process of operation and management. It actively promotes paper conservation, energy consumption control, and green travel, and carries out environmental public welfare activities to guide employees in spreading low-carbon concepts and promoting ecological culture through concrete actions.



The Fifth “Drinking Water and Remembering Its Source: Exploring Sanjiangyuan” Public Welfare Activity Supported by Minmetals International Trust - Sanjiangyuan Siyuan Charity Trust



Greenery Planting Operations at China First Metallurgical Group’s Huangshi Daye Lake Project

5 Building a Caring Workplace through People-centered Development

Talent underpins a nation, a cornerstone of governance, and a driver of business success. China Minmetals regards strengthening the enterprise through talent as a core lever. It remains committed to systematic talent development, diversified empowerment, and scientific talent utilization. The Company has strengthened its backbone team of sci-tech talent, cultivated master craftsmen of the nation, and built a high-caliber, professional talent team. At the same time, with warm and thoughtful measures, China Minmetals has deepened employee care, enabling talent growth and corporate development to advance in the same direction and at the same pace. These efforts have brought together strong talent momentum and collective drive for the Group's high-quality development.

- Protecting employee rights and interests
- Supporting employee growth
- Caring for employees with dedication
- Deepening reform of the industrial workforce



Protecting Employee Rights and Interests

China Minmetals upholds the principle of equal employment, safeguards fair employment opportunities for employees, continuously improves its compensation and benefits system, deepens democratic management, and listens to and actively responds to employee needs. Through warm and thoughtful measures, the Company protects employees' lawful rights and interests in all respects.

Upholding Equal Employment

The Company strictly complies with laws and regulations such as the *Labor Law of the People's Republic of China*, clearly defines recruitment and employment requirements, and attracts and uses talent in a fair, just, and open manner. It resolutely prohibits illegal practices such as forced labor, harassment and abuse, and child labor. China Minmetals treats employees of different ethnic groups, genders, ages, religious beliefs, and cultural backgrounds equally, strictly prohibits all forms of discrimination, respects employee privacy, and fosters a fair, diverse, and inclusive workplace environment. In 2025, the Company held nine large-scale two-way recruitment events, and coordinated the participation of more than 80 enterprises.

In 2025



Total employees

180,246

On-post employees

163,629



China Minmetals 2026 Coordinated Campus Recruitment

Female employees

38,392

Female managers

14,400

Improving Compensation and Benefits

The Company continued to deepen compensation reform by coordinating total payroll management, tiered and categorized incentives, process-based assessment, and people-centered support. It worked to build a modern compensation governance system with clear orientation, standardized operation, and strong vitality, highlighting the guiding role of core indicators such as core responsibilities and primary businesses, sci-tech innovation, and labor productivity improvement. These efforts stimulated the endogenous motivation of officials and employees to take initiative and pursue success. The Company contributes to employees' five social insurances and housing provident fund, provides benefits such as paid leave and maternity leave, and has established supplementary medical insurance and enterprise annuity schemes, forming a diversified benefits system.

Practicing Democratic Management

The Company has deeply practiced the concept of whole-process people's democracy, guided employees to participate in corporate democratic management in an orderly manner, and continuously improved the democratic management system centered on the Employees' Congress. China Minmetals significantly increased the proportion of advanced model employees, primary-level employees, and frontline employees in the new session of the Trade Union Congress and the Employees' Congress, ensuring that employee representatives are both exemplary and broadly representative. The Company further standardized and enriched the role of the Employees' Congress by holding China Minmetals' Employees' Congress together with its annual work meeting, adding reports on the performance-related benefits of enterprise leaders in accordance with regulations, and inviting employee representatives to attend the mid-year work meeting. At the same time, using proposals from employee representatives as a key tool, the Company focused on resolving issues with strong employee concerns and prominent contradictions. It established a closed-loop management mechanism covering proposal submission, filing, handling, and feedback, ensuring that every proposal receives a response and fully protecting employees' rights to know, participate, elect, and supervise. These efforts protect employees' lawful rights and interests in all respects.

Supporting Employee Growth

Talent is the primary resource. China Minmetals has built multiple development channels for skilled, professional, and managerial talent. By empowering high-quality development through talent growth, the Company enables every employee to find fertile ground for development and pursue their ambitions.

Creating Smooth Development Pathways

Adhering to the philosophy of "valuing both virtue and competence, and unlocking the full potential of every employee," the Company has built comprehensive and multi-level career development channels. It has further advanced the integrated reform of position management, developed a parallel development system covering skilled, professional, and managerial talent, and opened channels for talent mobility, enabling all types of talent to fully demonstrate and apply their strengths.

Fully Advancing the Integrated Reform of Position Management

The Company advanced the implementation of the Group's unified position system across nearly 140 third-tier subsidiaries. This has broken down barriers between enterprises, opened mobility channels, and laid an institutional foundation for cross-unit exchanges, multi-position experience, and full-cycle growth of officials and talent. It has promoted the formation of a talent development pattern featuring broad-based growth, extensive exchange, and dynamic circulation.

Building an Internal Talent Mobility Platform

The Company activated an internal competitive selection mechanism and built an online internal recruitment platform, effectively stimulating internal talent vitality.

In 2025

a total of

109

cross-unit positions were released

facilitating the cross-unit mobility of more than

100

key employees

Improving Multi-sequence Career Development Pathways

For skilled talent

The Company removed the “last-mile” barriers to implementing the new eight-grade vocational skills grading system, revised the measures for occupational skill level recognition and their implementation rules, and issued the *Management Measures for Chief Technicians and Special-Grade Technicians*.

Throughout the year, more than **2,670** skilled employees were promoted in skill grades

and **7** high-skilled employees were awarded professional titles of senior engineer or above.

For professional talent

The Company improved the professional talent evaluation system, carried out the required term renewal of evaluation committees, dynamically optimized the expert pool, and strictly implemented closed-loop management across the full process of professional title evaluation.

Nearly **2,400** employees were promoted to senior professional titles throughout the year.

For managerial talent

The Company broadened its vision in selecting and appointing personnel by bringing principal positions at key subsidiaries and key posts in important overseas mining projects under top-tier centralized management. It improved the closed-loop mechanism covering all major links of the full-process cadre selection and appointment workflow.

In 2025 employees born in the 1980s accounted for **44.4%** of newly promoted or further appointed cadres

Supporting Employee Growth

The Company has adhered to tiered talent development and systematic empowerment. It has built a full-cycle, multi-scenario training and growth system, strengthened education and training platforms, implemented categorized talent development programs at different levels, and enhanced practical training and experience. By developing employee capabilities in frontline positions, China Minmetals has accelerated the formation of strategic talent strength to support high-quality development.

Strengthening Education and Training Platforms

The Company officially established the Minmetals Cadre Education Center, and organized various training programs for key groups such as leading officials, and business management talent. It also promoted the Minmetals Online School. In 2025, the Minmetals Cadre Education Center provided offline training for nearly 300 participants. The online school platform had more than 120,000 users and launched over 5,800 courses, creating a learning platform that covers the whole Group, connects all levels, and responds around the clock.

Developing Talent by Level and Category

Sci-tech talent

The Company built a talent pipeline led by top talent, supported by backbone talent, and strengthened by young talent. It deepened the development of the “chief mentor system,” upgraded the management systems for chief scientists and chief technical experts, implemented a young sci-tech talent incubation program, and promoted joint master’s and doctoral training programs in engineering.

Overseas talent

The Company deepened the International Mining Leadership Talent Development Plan, advanced the first batch of post-based training for outstanding mining talent, and recommended one outstanding representative to participate in specialized training and successfully join the United Nations Environment Programme, making the employee the first person from a SASAC-supervised central SOE to be recruited by an international organization.

Industrial workers

The Company held an innovation training camp for high-skilled talent and built platforms for skill improvement through skills competitions and sci-tech achievement awards.

Strengthening Practical Training and Experience

The Company has adhered to evaluating and appointing officials on the frontlines of resource continuity, sci-tech innovation, major projects, and deepened reform. It selected outstanding officials for overseas project assignments and actively implemented external temporary post programs such as support for Qinghai and Tibet, paired assistance, assignments to western minority areas, and training-through-practice in Gansu, further expanding platforms for growth and experience.



Opening Ceremony of the Second Training Program of the “Metal Mining Pioneer Plan”



2025 Outward Bound Training for New Employees

Caring for Employees with Dedication

China Minmetals has always protected the health and happiness of every dedicated employee. Through diverse cultural and sports activities, the Company strengthens team cohesion. Through targeted visits and assistance, it brings warmth to frontline employees and employees in difficulty. With thoughtful measures in daily work, China Minmetals ensures that comprehensive and multi-dimensional care reaches every employee.

Occupational Health Protection

Employees’ physical and mental health is the foundation of corporate sustainability. The Company continued to strengthen the prevention and control of occupational hazards, enhance source governance and prevention, and encourage enterprises at all levels to improve production and working environments through technological upgrading, facility development, and strengthened on-site management. These efforts further prevent, control, and eliminate occupational disease hazards. The Company also introduced professional medical institutions to provide specialized services and launched activities such as “Caring for Workers’ Mental Health,” safeguarding employees as they perform their duties and pursue steady development.

Guangxi Huati Builds a Strong Line of Defense for Occupational Health with an Intelligent Packaging System

Guangxi Huati Technology has advanced the transformation of replacing manual work with mechanization, reducing manpower with automation, and enabling unmanned operations through intelligent technologies. To address dust challenges in powder operations, the company developed the industry’s first intelligent packaging system, realizing full-process automation and unmanned operation for powder conveying and packaging. The system completely prevents operators from direct contact with powder and significantly reduces dust concentration at the worksite, reducing occupational disease hazards at the source.



Intelligent Masterbatch Packaging Production Line

MCC Ramu Medical Team Strengthens Occupational Health through Targeted Diagnosis, Treatment, and Capacity Upgrading



In 2025, the MCC Ramu medical team continued to provide employees and surrounding villagers with targeted diagnosis, treatment, and emergency care services covering common diseases, occupational diseases, and acute and critical conditions. Throughout the year, the team completed 767 medium- and high-risk occupational health examinations for local employees and worked with third-party institutions to ensure comprehensive examinations. The team achieved an important upgrade in medical capabilities. The smelter clinic added malaria parasite blood smear testing and completed more than 1,000 tests in total, shortening the average fever reduction time for patients by 12 hours and achieving a 100% treatment effectiveness rate. Its surgical emergency response capacity also improved significantly, enabling the treatment of complex trauma and cardiopulmonary resuscitation. At the same time, the company continued to improve medical facilities and medicine reserve systems. During Safety Week, it also carried out malaria screening and treatment for more than 100 students at a local primary school, protecting health and life in all respects.



Occupational Health Activity in Xiangjiang New Area Hosted by Changyuan New Energy



Health Examinations Provided by Shanghai Baoye for Project Employees

Keeping Work-Life Balance

The Company actively organized employee sports games, cultural creation activities, and other cultural and sports activities popular among employees, enriching their cultural life and creating a comfortable and supportive working environment.

China Minmetals Successfully Concludes Seven Employee Sports Games



Opening Ceremony of the Sports Games



Competitive Events



Fun Events

To celebrate the 75th anniversary of China Minmetals, the Company innovatively organized seven employee sports games by region, covering Northeast China, Northwest China, North China, South China, Central China, East China, and Southwest China. The events attracted more than 5,000 athletes from enterprises at all levels of the Group and 120 representative teams. The sports games not only provided employees with a competitive stage to show their spirit and strengthen their health, but also effectively enhanced communication and friendship among employees from different regions and units, significantly strengthening their sense of belonging, cohesion, and unity.

China Tungsten and Hightech Successfully Concludes the 2025 "Diamond Cup" Air Volleyball Tournament



In November 2025, China Tungsten and Hightech successfully held the 7th "Diamond Cup" Air Volleyball Tournament. The five-day tournament brought together 15 representative teams from across the enterprise's industrial chain. On the court, players competed with determination and cooperated closely. The online livestream attracted more than 2,000 views, fully demonstrating energy, passion, and team spirit. The tournament not only enriched employees' cultural and sports life, but also built a solid platform for exchange and integration among enterprises across the full industrial chain. It vividly reflected the atmosphere of "One CMT Family" and the corporate spirit of "tempered a thousand times to cut through gold," injecting strong momentum into bringing employees together for shared progress and advancing high-quality development.



Competition Site

Strengthening Employee Care with Full Commitment

China Minmetals remains committed to visiting and supporting frontline employees and employees in difficulty, and provides consolation funds to primary-level employees facing hardships. The Company has strengthened care for female employees and effectively protected their rights and interests. It has also visited retired employees and retired veteran cadres, extending warm and thoughtful care to all employees in a comprehensive and multi-dimensional manner.

China Minmetals Holds a Double Ninth Festival Symposium to Jointly Discuss the Development Blueprint for the 15th Five-Year Plan Period



On October 28, 2025, China Minmetals carefully organized a symposium. Chen Dexin, Chairman of China Minmetals, and other leaders held discussions with veteran colleagues and expressed gratitude for the solid foundation they had laid for the Company's development. The symposium invited eight representatives of veteran colleagues to exchange views on topics such as "Reviewing 75 Years and Looking Ahead to the 15th Five-Year Plan Period." China Minmetals listened carefully to their opinions and suggestions on the Company's future planning for the 15th Five-Year Plan period, transforming the traditional virtue of respecting and caring for the elderly into valuable strength for sustainable corporate development and creating a harmonious and enterprising corporate culture.



Chen Dexin and Zhu Kebing Holding Discussions with Former Leaders and Veteran Colleagues

Minmetals Land Holds a Female Employee Symposium to Listen to Women's Voices



On December 8, 2025, the Female Employees Committee of the Trade Union of Minmetals Land organized a symposium for female employees. Representatives of female employees actively offered suggestions on the theme of "employee care and service optimization." Trade union representatives listened carefully, recorded their views on site, and responded one by one to key concerns such as extending the physical examination period. These efforts helped establish a sound interaction mechanism in which employee appeals receive responses and suggestions receive feedback, enabling primary-level employees to truly become participants in and contributors to corporate governance.



Female Employee Symposium Held by the Trade Union of Minmetals Land

Deepening Reform of the Industrial Workforce

China Minmetals has further advanced the reform of industrial workforce development and vigorously promoted the model worker spirit, labor spirit and craftsmanship spirit. The Company has worked to build a high-caliber industrial workforce for the new era, one with ideals and convictions, strong technical skills and innovation capabilities, and a strong sense of responsibility and dedication. These efforts provide important support for industrial transformation and upgrading and high-quality development.



8 employees were named National Model Workers

Wu Chunqiao and Liu Xiangguo were recognized as "National-level Master Artisans"



2 craftsman colleges and **8** model worker innovation studios were listed by the All-China Federation of Trade Unions as key support targets

1 production team was recognized by the All-China Women's Federation as a National Women's Pacesetter Post

2 employees were selected as candidates for central SOE craftsman development



Wu Chunqiao, Chief Technician of China Minmetals and Masonry Worker of China First Metallurgical Group, Invited to Attend the National V-Day (September 3) Commemorations on Site

Wu Chunqiao and Liu Xiangguo Recognized as National-level Master Artisans in 2025



On September 15, 2025, the General Office of the All-China Federation of Trade Unions officially issued the *Notice on Recognizing National-level Master Artisans in 2025*. Wu Chunqiao and Liu Xiangguo, outstanding representatives of China Minmetals' high-skilled talent, were included in the first cohort of 2025 national-level master artisans, representing the highest honor and technical level among China's skilled talent. Their selection not only reflects their deep expertise and outstanding contributions in professional and technical fields, but also demonstrates China Minmetals' long-term commitment to cultivating skilled talent and vigorously promoting the craftsmanship spirit.



National-level Master Artisan
Wu Chunqiao



National-level Master Artisan
Liu Xiangguo

China Minmetals Contestants Achieve Excellent Results at the Third National Vocational Skills Competition



At the Third National Vocational Skills Competition, a young technical worker team from China 19th Metallurgical Corporation, a subsidiary of China Minmetals, stood out from 3,420 top contestants nationwide with outstanding skills and performance. The team achieved excellent results of one gold medal, two silver medals, one bronze medal, and two excellence awards, vividly demonstrating the craftsmanship spirit of industrial workers in the new era as they pursue excellence and continuous improvement.

Zhang Zhixiang Winning the Gold Medal in Welding

6 Building a Better Future through Shared Progress and Harmony

Matters of national significance are rooted in responsibility, and corporate commitment is proven through action. China Minmetals has always kept in mind matters of national significance. The Company has actively integrated itself into national strategic planning, supported coordinated industry development and the modernization and upgrading of industrial chains, and deepened its engagement in public welfare. With a strong commitment to people's well-being, it has served local development and common prosperity with sincerity and dedication. China Minmetals has also actively fulfilled its responsibilities overseas, upheld mutual benefit, win-win cooperation, joint contribution and shared benefits, and promoted local prosperity and people-to-people connectivity. Through concrete actions, the Company has written a new-era central SOE social responsibility story with warmth, strength, and vision.

- Boosting mutually beneficial cooperation
- Supporting regional development
- Supporting public welfare and charitable activities
- Deepening overseas responsibility fulfillment



Boosting Mutually Beneficial Cooperation

China Minmetals takes building a modern mining industrial ecosystem as its mission. The Company has actively advanced responsible supply chain development, deepened strategic cooperation, connected key links across the innovation chain, industrial chain, and value chain, built industry exchange platforms, and promoted the industry's transformation toward green, intelligent, and high-end development.

Responsible Supply Chain

Supply Chain Management

The Company continued to strengthen full-process supplier management and control and optimize systems and mechanisms. It consolidated and revised several core policies, including the *Measures for Procurement Management of China Minmetals*, prepared the *Negative List for Bidding and Tendering*, and established a monthly supervision ledger, achieving 100% closed-loop management. China Minmetals further advanced centralized procurement, established a centralized procurement catalogue, and launched the development of the Minmetals Smart Procurement Marketplace, enhancing supply chain security and resilience. The Company strengthened supplier assessment mechanisms and improved supplier admission efficiency and quality through intelligent approval technologies. It also carried out special rectification and included non-compliant suppliers in the blacklist. For bidding and tendering in engineering construction, the Company developed nine categories of risk models to support penetrating business management.

In 2025

the Company achieved a supplier assessment rate of **100%**

Supply Chain ESG

The Company actively practiced the concept of supply chain ESG management and fully incorporated environmental protection, work safety, and other factors into supplier and contractor access and assessment requirements. It gives priority to procuring green products and encourages long-term cooperation with suppliers that have green assurance certifications. China Minmetals has advanced direct factory delivery, promoted new energy transport vehicles, reduced energy consumption and carbon emissions during transportation, and provided green transportation services to internal and external customers. These efforts have encouraged upstream and downstream partners across the supply chain to jointly practice green, low-carbon, and compliant operations, building a sustainable responsible supply chain ecosystem.

In 2025, as a founding organization of the China Supplier ESG Rating Platform, the Company continued to support the development of China's ESG ecosystem.

MCC Ramu Strengthens the Compliance Foundation of Its Supply Chain through Due Diligence Management

MCC Ramu advanced responsible supply chain development to high standards. It engaged a third-party organization to conduct systematic identification and assessment, comprehensively reviewed risks, and strengthened the foundation for international compliance. The company cooperated with downstream customers to complete supply chain due diligence, organized multiple departments to participate in supply chain training, and learned about the EU Battery Regulation, ESG regulations for nickel mines, and audits of critical mineral supply chains. In 2025, MCC Ramu completed an external audit and received an AA rating in the Certificate of Mineral Supply Chain Due Diligence Assessment issued by the China Chamber of Commerce of Metals, Minerals & Chemicals Importers & Exporters (CCCMC).



Certificate of Mineral Supply Chain Due Diligence Assessment, Grade AA

Deepening Strategic Cooperation

Government-enterprise Cooperation

China Minmetals held in-depth exchanges with the governments of provinces, autonomous regions, municipalities, and districts including Gansu, Hunan, Qinghai, Liaoning, Jiangxi, Guangxi Zhuang Autonomous Region, Guizhou, Shanxi, Hainan, Shanghai, and Dongcheng District on strengthening central-local cooperation. These efforts have jointly written a new chapter of coordinated development between government and enterprise and empowered high-quality development of both enterprises and regional economies.



China Minmetals Signing a Strategic Cooperation Agreement with the People's Government of Hunan Province in February 2025



China Minmetals Signing a Strategic Cooperation Agreement with the People's Government of Gansu Province in March 2025



China Minmetals Holding a Working Meeting with Jiangxi Province in September 2025



China Minmetals Holding a Working Meeting with Guizhou Province in November 2025

Business-to-business Cooperation

China Minmetals gave full play to the three roles of central SOEs in sci-tech innovation, industrial control, and safety support. The Company actively advanced cross-sector collaborative cooperation, held strategic cooperation discussions with Sinograin, China Logistics Group, China Telecom, China National Nuclear Corporation, China Reform Holdings Corporation, Bank of China, Gansu Electric Group, and Jiangxi Copper Corporation, expanded cooperation areas, and worked together to develop new models of cooperation among central SOEs.

China Minmetals Signs a Strategic Cooperation Agreement with China Reform Holdings Corporation

In March 2025, China Minmetals signed a strategic cooperation agreement with China Reform Holdings Corporation in Beijing. Going forward, the two parties will continue to expand cooperation across various fields, strengthen coordination in resource development, technology industries, fund investment, factoring and leasing, green development, and other areas, deepen industry-finance integration, jointly serve national strategies, and strive to build a new model of cooperation among central SOEs.



Signing Ceremony

China Minmetals Signs a Strategic Cooperation Agreement with Bank of China



In November 2025, China Minmetals signed a strategic cooperation agreement with Bank of China in Beijing. The two parties will deepen cooperation in core areas such as mine mergers and acquisitions, project financing, bond issuance, global cash management, and transformation of traditional industries. Focusing on enhancing core functions and strengthening core competitiveness, they will jointly advance high-quality development of the full mineral industrial chain.



Signing Ceremony

University-
enterprise
Cooperation

The Company has deepened coordinated development among industry, universities, and research institutes, explored new models of university-enterprise cooperation, and continued to strengthen industry-university-research collaboration with universities including University of Science and Technology Beijing, Northeastern University, and Tianjin University. Through coordination and deep integration across the innovation chain, industrial chain, capital chain, and talent chain, China Minmetals has promoted the efficient commercialization of sci-tech achievements.

China Minmetals Signs a Strategic Cooperation Agreement
with University of Science and Technology Beijing



On November 17, 2025, China Minmetals signed a strategic cooperation agreement with University of Science and Technology Beijing. Building on a solid foundation of cooperation, the two parties will focus on areas such as the development of the strategic rare metal industry, original technology R&D, and the training of interdisciplinary international talent. Centering on the “five priorities,” they will comprehensively deepen cooperation, promote the deep integration of industry, universities, research, and application.



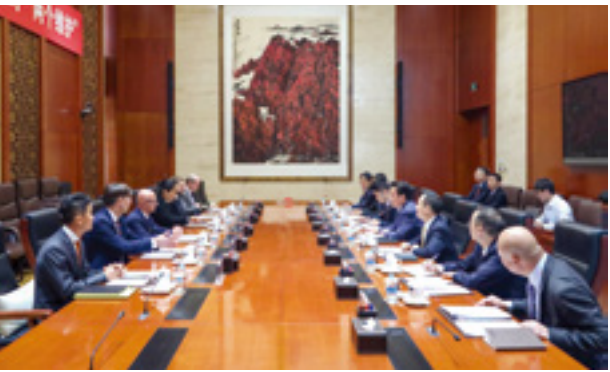
China Minmetals Signing a Strategic Cooperation Agreement with University of Science and Technology Beijing

International
Cooperation

The Company has continued to build high-standard international cooperation platforms and deepen mutually beneficial and win-win cooperation with international partners including Vale, KGHM Polska Miedź S.A., the International Seabed Authority, Trafigura, and Rio Tinto. Through pragmatic actions, China Minmetals has fulfilled its global responsibilities, demonstrated Chinese wisdom, and conveyed China’s sense of responsibility through joint development.



Meeting with a Delegation Led by Gustavo Pimenta, CEO of Vale, in March 2025



Meeting with a Delegation Led by Andrzej Szydło, President of the Management Board of KGHM Polska Miedź, in October 2025

MCC Builds a Benchmark Green Mining Project in the Middle East



MCC, working with Jinnan Steel Group under an EPCM model, is jointly developing the Sohar beneficiation plant in Oman and its supporting stockyard, long-distance slurry transportation, and dry tailings stacking project, creating a new model for international mining cooperation. As a landmark project of China-Arab economic and trade cooperation and the first implemented project under Vale’s Middle East hub plan, the project will, upon completion, become a global demonstration base for large-scale production of high-quality, green and environmentally friendly furnace burden from Brazilian hematite. It will not only inject a new growth driver of green industrial ecological economy into Oman, but also provide a “China solution” for the low-carbon transformation of the global steel industry through the global expansion of Chinese technologies and standards, demonstrating the positive role of high-quality Belt and Road cooperation and coordinated development of the green metallurgical industrial chain.



18-million-ton Green Beneficiation Project in Sohar, Oman

Leading Industry Development

The Company actively participated in high-end industry forums and major exhibitions and exchanges. It led or participated in the preparation and revision of multiple group standards, industry standards, and national standards, giving full play to its role as an industry leader and empowering high-quality industry development.

Chen Dexin Attends the ESG China Innovation Annual Conference and Delivers a Keynote Speech



On October 24, 2025, the ESG China Innovation Annual Conference and the First ESG International Expo opened at Shougang Park in Beijing. Chen Dexin, Chairman of China Minmetals, was invited to attend and deliver a keynote speech, sharing the Company's practices and plans for implementing ESG principles through its full value-chain advantages. At the event, China Minmetals was recognized as an ESG Excellent Practice Case of the Year and was included in the Supply Chain ESG Pioneer 50 list. These honors demonstrated China Minmetals' leadership in ESG practices in the metals and minerals industry and set a benchmark for high-quality industry development.



Chen Dexin Delivering a Keynote Speech

China Minmetals Holds the Tungsten Industrial Chain Synergy Initiative and Coordinated Development Conference



On October 17, 2025, the China Minmetals Tungsten Industry Chain Synergy Initiative and China Tungsten and Hightech Industrial Chain Coordinated Development Conference was successfully held in Zhuzhou, Hunan Province. Approximately 220 representatives from China Minmetals subsidiaries, local governments, industry associations, and outstanding suppliers attended the conference. Participants jointly advanced the integration of resources across the tungsten industrial and supply chains, supported coordinated improvement in quality and efficiency across the industrial chain, and successfully completed all agenda items.



Site of the Tungsten Industrial Chain Synergy Initiative and Coordinated Development Conference



China Minmetals Attending the 31st China Lanzhou Investment and Trade Fair in July 2025



China Minmetals Attending the Guangxi High-Quality Development Conference on Non-Ferrous Metals and Critical Metals Industry and Project Investment and Cooperation Fair in November 2025

Supporting Regional Development

China Minmetals has focused on key regions supported by national policies, including central and western China, resource-based regions, old industrial bases, border areas, and less-developed regions. The Company has transformed its industrial, capital, and technological strengths into endogenous drivers of regional development, supporting key regions in strengthening industries, expanding employment, and promoting development through solid industrial investment and economic contributions.

Cultivating Key Industries

Closely aligned with the national regional development strategy, China Minmetals has promoted the implementation and construction of a number of major industrial projects based on the resource endowments and industrial foundations of key regions. These projects provide strong support, deliver long-term benefits, and enhance development momentum, continuously strengthening the foundation for regional economic development.

China ENFI's EPC-contracted Xinjiang Huoshaoyun Lead-Zinc Smelting Project Put into Operation



The Xinjiang Huoshaoyun Lead-Zinc Mine Smelting Project, for which China ENFI serves as the EPC general contractor, is a key construction project in Xinjiang Uygur Autonomous Region. Upon full operation, it will become the world's largest oxidized ore production line, with annual output of 560,000 tons of zinc ingots and 110,000 tons of lead ingots. The project integrates 28 cutting-edge technologies, with green power accounting for more than 85% of its electricity use. It achieves zero wastewater discharge and flue gas emissions that meet the national special emission limits. In July 2025, the project officially began feeding materials for production. In December of the same year, the first batch of lead ingots successfully rolled off the production line, marking full system connectivity of the oxidized ore processing line and the project's formal entry into a new stage of scaled production. The completion and operation of the project releases powerful momentum for the economic take-off of southern Xinjiang. It contributes significantly to the high-quality development of the economic belt around the Tarim Basin and demonstrates China Minmetals' solid commitment to supporting regional development.



Xinjiang Huoshaoyun Lead-Zinc Mine 600,000 t/a Lead-Zinc Smelting Project EPC-contracted by China ENFI

Deepening Presence in Liaoning to Support the Full Revitalization of Northeast China through Project Construction and Technological Innovation



The Chentaigou Iron Mine is a super-large underground ferrous metal mine project invested and constructed by China Minmetals in Anshan, Liaoning Province. It is one of the first key projects launched under China's "Cornerstone Plan." Phase I is designed with an annual production capacity of 11 million tons of iron ore and 4.7 million tons of iron concentrate. In 2025, all five vertical shafts of the project were completed ahead of schedule. The project had cumulatively completed 91% of the total infrastructure works required for trial production. The project team was once again named an "Outstanding Contribution Enterprise in the Three-year Action for New Breakthroughs in the Full Revitalization of Northeast China" and received another commendation from the CPC Liaoning Provincial Committee and the People's Government of Liaoning Province. The rapid advancement of the project not only provides key resource support for Liaoning in cultivating a high-quality steel materials industrial cluster and building a trillion-yuan metallurgical new materials industrial base, but also injects strong momentum into the full revitalization of Northeast China through the industrial drive and technological leadership of a central SOE. It demonstrates China Minmetals' commitment and actions in serving national strategies and deepening local-enterprise cooperation.



Anshan Minmetals Chentaigou Mining Co., Ltd. Commended by the CPC Liaoning Provincial Committee and the Liaoning Provincial People's Government

Building Livable Cities

Through projects such as urban renewal, urban village renovation, and innovative residential construction in Beijing, Tianjin, Xiong'an, and other areas, China Minmetals has achieved practical results in improving people's livelihoods and enhancing urban quality, demonstrating the responsibility of a central SOE and the effectiveness of transformation.

Urban Renewal Project of Tianjin No. 1 Machine Tool Plant

China MCC20 Group precisely identified the intersection between industrial heritage protection and the needs of modern urban functions. It transformed industrial heritage into a vibrant new district. By protecting historic buildings, upgrading supporting facilities, and introducing emerging industries, the project realized the transformation from an "industrial rust belt" to an "urban showcase belt" and promoted the integration of industry and city.



Innovation Block Residential Project in the Xiong'an Start-up Area

China MCC22 Group focused on green ecology, intelligent innovation, and improved living quality. Through a "good housing" construction model featuring digitalization, intelligence, and refined management, it built high-quality, smart, and livable housing for the new city of Xiong'an.



Baoding Lianchi Urban Village Renovation Project

With improving people's livelihoods as its goal, China MCC17 Group supported urban renewal through the coordinated deployment of the technology chain, industrial chain, supply chain, value chain, and ecological chain. It actively promoted the development of good houses, good residential compounds, good communities and good urban areas.



Devoting Care to Public Welfare and Charity

China Minmetals has always remained true to its public welfare mission. The Company has widely carried out volunteer services, promoted the spirit of dedication, and conveyed warmth and strength through concrete actions. It has shouldered major responsibilities and fully participated in earthquake relief, emergency support, and post-disaster reconstruction, focusing on people's livelihood needs and bringing together forces of care and support.

Carrying Out Volunteer Services

The Company regards volunteer service as an important vehicle for bringing together the strength of young employees. It regularly carries out various public welfare activities and promotes the integration of volunteer services into primary-level communities to benefit the public.

1/2. During the 9th Asian Winter Games in 2025, Employees of Minmetals Luobei Providing On-site Guidance, Vehicle Dispatching, and Other Services

3. Volunteers Organized by Minmetals Development Carrying Out Civilized Volunteer Services at Yuyuantan Park

4. Minmetals Securities Recognized as a National Demonstration Site for Learning from Lei Feng in the Financial System



Supporting Emergency Rescue and Disaster Relief

In the face of various disasters and emergencies, China Minmetals has responded immediately and risen to challenges, rushing to the frontline to carry out rescue operations. At the same time, it has implemented assistance measures such as donations, material contributions, and supply support, making every effort to support disaster relief and reconstruction. Through these actions, the Company has delivered care and strength and provided strong support for protecting people's lives and property and promoting stable recovery in disaster-stricken areas.

China Minmetals Provides Full Support to Earthquake-stricken Areas in Shigatse, Tibet



After an earthquake struck Shigatse, Tibet in January 2025, China Minmetals immediately donated CNY 10 million to the disaster-stricken area for earthquake relief and post-disaster reconstruction. China MCC22 Group, a subsidiary of China Minmetals, formed a task force, purchased urgently needed materials such as generators and tents overnight, and arranged dedicated personnel and vehicles to deliver them quickly to the disaster area. These efforts provided strong support for safeguarding the basic living needs of affected residents and helping restore order in the disaster area, demonstrating the public welfare commitment of a central SOE.



Emergency Delivery of Relief Supplies by China MCC22 Group

China Minmetals Provides Rapid Support for Flood Rescue and Disaster Relief in Yuzhong County, Gansu



After a severe rainstorm and flood disaster hit Yuzhong County, Gansu Province in August 2025, China Minmetals responded immediately and quickly organized its subsidiaries to participate in rescue operations. China MCC17 Group immediately mobilized personnel and equipment from its Lanzhou project and formed several rescue and disaster relief teams to rush to the frontline. The teams efficiently completed key tasks such as dredging rivers, draining water and removing silt, and leveling riverbeds. At key locations including Xinghuang Road, they urgently installed culverts, built temporary bridges, and constructed solid temporary access roads, providing strong support for follow-up rescue teams and supplies to enter the core disaster area.



Dredging Rivers around S104 in Yuzhong County



Emergency Construction of a Temporary Access Road to Duijiazhuang

China Minmetals Donates HKD 10 Million to Support Disaster Relief in Hong Kong



In November 2025, Hong Kong suffered a major fire. Upon learning of the disaster, China Minmetals acted quickly and made an emergency donation of HKD 10 million to Hong Kong, specifically for emergency rescue and post-disaster reconstruction. At the same time, the Company immediately organized a volunteer team of more than 30 employees from its Hong Kong-based enterprises to support frontline relief efforts. They went to the Kai Tak Youth Hostel to deliver urgently needed supplies and provided support services at disaster-affected sites in Tai Po District, standing with Hong Kong residents through concrete actions during difficult times.

Deepening Overseas Responsibility Fulfillment

China Minmetals has always upheld the principles of extensive consultation, joint contribution, and shared benefits. The Company practices value creation, supports talent development, improves local livelihoods, promotes cultural exchanges, builds bridges for people-to-people connectivity, and promotes the integration and coexistence of diverse cultures. It works with local partners to achieve mutual benefit, win-win cooperation, and shared development.

Practicing Value Creation

China Minmetals actively supports the high-quality economic and social development of host countries where its overseas projects are located. Relying on its global mineral resource layout, the Company has carried out stable production and operations, deepened localized operations, expanded local procurement and employment, and actively shared advanced technologies and management experience, providing strong support for local economic growth.

Las Bambas Mine Empowers Integrated Community Industries and Shares the Benefits of Mine Development



In 2025, Las Bambas Mine established stable cooperative relationships with more than 310 community enterprises. A total of 170 trucks from local communities participated in concentrate transportation. Local procurement exceeded USD 200 million throughout the year. The mine directly and indirectly created nearly 12,000 jobs, with local employees accounting for more than 98%. More and more community families have transformed from “bystanders” into “participants,” sharing the benefits of mine development. In 2025, Apurímac Region, where the project is located, recorded economic growth of 27.3%. The mine’s output value accounted for 72% of the region’s GDP, 9% of Peru’s mining GDP, and 1% of national GDP, making it an important pillar of the local economy.



Workers at the Las Bambas Mine Open Pit

Minmetals Central and South Asia Resources’ China-Pakistan Mining Cloud Procurement Platform Supports the Digital Transformation of Pakistan’s Mining Industry



In January 2026, Minmetals Central and South Asia Resources successfully launched the China-Pakistan Mining Cloud Procurement Platform in Pakistan. The platform precisely connects supply chain resources in China and Pakistan. Through intelligent matching, full-chain logistics tracking, and compliant transaction safeguards, it significantly reduces procurement costs and operational risks for local Pakistani enterprises and improves industrial coordination efficiency. It efficiently introduces high-quality Chinese products, technologies, and services into Pakistan. By promoting digital integration across the full mining value chain, it helps Pakistan cultivate new momentum for industrial upgrading. Through practical digital innovation measures, the platform supports Pakistan’s economic development and the building of a sustainable industrial ecosystem.



China-Pakistan Mining Full Value-Chain Cooperation Forum

Deepening Local Cooperation to Support Economic and Social Development in Papua New Guinea



MCC Ramu actively supports local economic development in Papua New Guinea and continues to increase its support for local business development. In 2025, the company implemented 59 long-term, short-term, and temporary business opportunity contracts, with a total contract value of approximately PGK 180 million. It provided more than 1,300 jobs, and local procurement covered aviation, transportation, general supplies, and various services, effectively driving local industrial development and improving people's livelihoods.

Supporting Talent Development

The Company has continued to support local talent development and carried out systematic talent cultivation. Through diversified programs such as skills training, practical exercises, and vocational skills certification, China Minmetals has cultivated a large number of local talent teams and injected lasting momentum into local economic and social development.



The Eritrea Project Department of Minmetals Central and South Asia Resources held a "Certificate Presentation Ceremony for Loyal Service by Local Employees," presenting honorary certificates to 90 Eritrean employees in recognition of their long-term dedication to frontline work and their commitment to standing together with the company through challenges.

Building a "Three-tier Training and Dual-channel Promotion" System to Empower High-quality Development of Local Talent in Papua New Guinea



MCC Ramu has built a "three-tier training and dual-channel promotion" talent system to cultivate high-caliber mining talent for Papua New Guinea. The company has carried out university-enterprise cooperation with several universities in Papua New Guinea, implemented order-based training, and established scholarships and internship bases. It has introduced mentorship and job rotation systems, strengthened on-the-job practical training, and selected outstanding local employees to study and exchange in China. The company has also established dual promotion channels for management and technical positions, implemented open competition and multi-dimensional assessment, and effectively improved the comprehensive capabilities of local employees. These efforts have continuously supplied backbone talent for local mining development.



Group Photo of Papua New Guinean University Students Selected through the Company's Graduate Development Program

Minmetals Central and South Asia Resources Supports the Development of African Technical Backbone Talent through Mentorship and Coaching



The Asmara Copper-Gold Polymetallic Mine Project of Minmetals Central and South Asia Resources has tailored a systematic vocational skills training program for local employees. The program covers core content such as mechanical principles, maintenance skills, and equipment operation. The project innovatively established a targeted mentorship and coaching mechanism, pairing local trainees with Chinese technical experts. In areas such as mining, blasting, geological surveying and mapping, and equipment maintenance, it implemented a three-stage progressive training model covering theoretical instruction, practical reinforcement, and work review. This model has successfully supported the transformation of local technical backbone employees. By teaching people how to fish rather than simply giving them fish, it has injected lasting momentum into the sustainable economic and social development of the local area.

Improving Local Livelihoods

China Minmetals focuses on the needs of overseas communities. It does not conduct exploration or mining in legally protected areas, conducts environmental impact assessments at the early stage of project planning, and ensures real-time monitoring of air, water quality, and other environmental factors to effectively reduce impacts on the ecological environment. The Company has actively improved supporting services such as infrastructure, medical support, educational empowerment, and environmental protection, continuously enhancing local production and living conditions. Through concrete actions, it demonstrates the mission and commitment of a responsible central SOE in fulfilling social responsibilities overseas.



The project department of Shanghai Baoye for the Melchior Ndadaye International Airport Expansion and Renovation Project in Burundi visited the local Maison Cana Orphanage and delivered milk powder, diapers, and other supplies, extending sincere care to the children.



Minmetals Central and South Asia Resources donated medical supplies and office facilities to a local hospital in Taftan, Pakistan, delivering warmth and support to local healthcare services.

Las Bambas Mine Implements the "Heart of Bambas" Program to Deepen Community Co-development and Shared Benefits



In 2025, Las Bambas Mine continued to advance the "Heart of Bambas" program. Focusing on education, poverty reduction, and capacity building, the mine systematically fulfilled its long-term commitments to communities. Throughout the year, 1,408 community matters were registered, of which 89% had been completed or were steadily progressing. Through continuous improvement of teaching conditions and systematic enhancement of school quality, the "Community School Strengthening Program" was selected as one of Peru's annual successful cases and won a Special Contribution Award from the provincial education department. With its stable talent development mechanism, Las Bambas ranked first in the 2025 Most Attractive Mining Companies for Talent in Peru list released by Merco, further strengthening its positive reputation in local society.



The "Heart of Bambas" Program Leading Leapfrog Development in Local Communities

MCC Ramu Fulfills Social Responsibility with the Completion of the Danagari Community Water Supply Project



On May 8, 2025, MCC Ramu held the completion ceremony for the water supply project in the Danagari Community in Papua New Guinea. To fundamentally address livelihood challenges caused by rapid population growth, an overwhelmed existing water supply system, and water shortages during the dry season, the company implemented this key project and creatively proposed a “three points and one line” water supply solution. By building three new water storage hubs and laying 10 kilometers of pipelines, the project established a dual support system with both primary and secondary safeguards. Clean water was delivered directly to more than 100 households, resolving long-standing domestic and safe drinking water issues in the community. Through concrete actions, the project embodied the philosophy of “One Ramu, One Community” and demonstrated the positive contribution of Chinese enterprises to local livelihoods in overseas operations.



Water Supply System Built by MCC Ramu for the Danagari Resettlement Village

MCC Rescues Around 100 Disaster-affected Residents and Receives a Letter of Appreciation from the Sri Lankan Government



In November 2025, severe floods hit central and western Sri Lanka, seriously affecting areas along the Central Expressway Project contracted by MCC. The project department immediately activated its emergency plan, quickly and safely evacuated all 128 Chinese and Sri Lankan employees, and proactively deployed engineering machinery to assist the local government in rescue operations. It successfully rescued around 100 trapped residents and helped distribute food to 1,100 person-times. In addition, the project department donated funds for post-disaster reconstruction through the Chinese Chamber of Commerce in Sri Lanka. The Gampaha District Government sent a special letter of appreciation, highlighting the overseas responsibility and positive image of Chinese-funded enterprises.

Letter of Appreciation from the Gampaha Regional Government, Sri Lanka



Promoting Cultural Exchange

In its overseas operations, China Minmetals upholds people-centered care and cultural coexistence. The Company promotes cultural exchange and integration, respects local cultural traditions and customs, and builds bridges of communication among Chinese and foreign employees as well as community residents through diverse cultural interactions, cultural activities, and sports events.

MCC Ramu Participates in Celebrations for the 50th Anniversary of Papua New Guinea's Independence



In 2025, during the 50th anniversary of Papua New Guinea's independence, MCC Ramu supported the Golden Jubilee celebration in Madang Province as a platinum sponsor. The company organized a themed float to participate in the parade and received high recognition from the event organizing committee. MCC Ramu also participated in the official triathlon event, supported community cultural and sports initiatives, strengthened ties with the local government and communities, and demonstrated its long-term commitment to taking root locally and promoting shared development. Through cultural exchange, the company has promoted people-to-people connectivity and continued to build harmonious and mutually beneficial overseas community relations.



Company Float Team Participating in the Parade Celebrating the 50th Anniversary of Papua New Guinea's Independence



Minmetals Central and South Asia Resources' Eritrea Project Department Invited to Attend the 7th Eritrean Kite Festival, Joining Local Communities to Convey Friendship through Kites and Showcase the Company's Image



Chinese and Pakistani Employees Celebrate Chinese New Year by Making Dumplings, Putting Up Spring Festival Couplets and Sharing a Reunion Dinner

Future Prospects

The world today is undergoing profound changes unseen in a century, with the restructuring of global industrial chains intertwined with the reshaping of the global resource landscape. Facing a complex and changing internal and external environment, all employees of China Minmetals will remain committed to the strategic positioning of the main force serving new quality productive forces and new industrialization.” We will stimulate vitality through deepened reform, break through bottlenecks through technological research, improve quality and efficiency through lean management, actively cultivate new quality productive forces, and strengthen the foundation of a modern metals and mining industrial system.

“Those who start with determination must plan for completion; those who succeed make plans from the beginning.” The year 2026 opens the implementation of the 15th Five-Year Plan, and is critical for China Minmetals to uphold its mission and fulfill its role as an industrial pillar enterprise. All Minmetals employees will deepen expertise in the mining industry and strengthen strategic mineral supply capacity. Aiming to build a world-class metals & minerals conglomerate, we will demonstrate Minmetals’ commitment through deepening win-win global cooperation and advancing sustainable mining development.



Appendix

Key Performance Indicators

Economic performance	Unit	2022	2023	2024	2025
Operating income	CNY 100 million	8983	9346	8332	7485
Total tax payment	CNY 100 million	254	232	226	266
Rate of preservation and appreciation of state-owned assets	%	113	115	120	101
R&D expenses	CNY 100 million	218	227	191	169
Number of new patents	Nos.	9598	7203	7844	7637

Environmental performance indicators	Unit	2022	2023	2024	2025
Sulfur dioxide emissions	Ton	1380	1442	1247	2274
Nitrogen oxides emissions	Ton	13548	13619	13780	15977
Chemical oxygen demand (COD) emissions	Ton	1396	1456	1307	1267
Fresh water consumption	10,000 tons	11546	11912	10619	19760
Water reuse rate	%	86.2	86.0	87.9	92.6

Social performance	Unit	2022	2023	2024	2025
Number of employees	Person	174336	170779	166811	180246
Number of female employees	Person	36000	35863	35363	38392
Work safety investment	CNY 10,000	1106627	1185300	1175700	1033500
Number of employee training participants	Person-time	1196793	1161446	1240533	1466328
Signing rate of employment contract	%	100	100	100	100
Social insurance coverage rate	%	100	100	100	100
Coverage rate of physical examinations and health records	%	100	100	100	100
Proportion of contracts executed	%	100	100	100	100
Proportion of suppliers certified to the ISO 14000 management system	%	3.45	4.11	4.96	4.24
Proportion of suppliers certified to the OHSAS1800 management system	%	2.45	3.17	4.17	3.73

Note: Starting from 2025, the Company established China Salt Lake Industry Group Co., Ltd., and relevant entities have been brought under its actual control and consolidated into financial statements. There are discrepancies between the indicators disclosed in this report and those disclosed in previous periods due to changes in statistical scope.

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Rating Report

China Minmetals Corporation Sustainability Report 2025 at a Glance

Rating Results



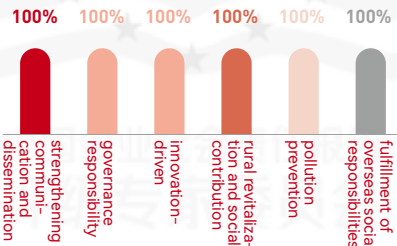
The China Minmetals Corporation Sustainability Report 2025 (hereinafter referred to as "the Report") has been rated as **Five-Star**, signifying an **excellent** corporate sustainability report.

Rating Result	Rating Graphic	Development Level
Five-Star Plus	★★★★★+	Exemplary
Five-Star	★★★★★	Excellent
Four-Star Plus	★★★★☆	Leading
Four-Star	★★★★	Outstanding
Three-Star	★★★	Good
Two-Star	★★	Developing
One-Star	★	Foundational

Performance Highlights

Process	★★★★★
Materiality	★★★★★
Completeness	★★★★☆
Balance	★★★★★
Comparability	★★★
Readability	★★★★★
Innovation	★★★★★

The Report achieves a Five-Star rating in the dimensions of Process, Materiality, Balance, Readability, and Innovation; a Four-Star Plus rating in Completeness; and a Three-Star rating in Comparability.



The Report systematically discloses 88.32% of the core indicators for the non-ferrous metal mining and beneficiation industry. Notably, it achieves 100% coverage of core indicators in the following areas: strengthening communication and dissemination under the responsibility management dimension; governance responsibility and innovation-driven development under the intrinsic responsibility dimension; rural revitalization and social contribution under the social responsibility dimension; pollution prevention under the environmental responsibility dimension; and fulfillment of overseas social responsibilities under the overseas social responsibility dimension.



The Report provides detailed comparative data for 20 key indicators over a continuous 4-year period. The most comprehensive 4-year comparable data disclosures are found in the following areas: employee responsibility under the social responsibility dimension, pollution prevention under the environmental responsibility dimension, and governance responsibility under the intrinsic responsibility dimension.

Recommendations for Improvement

1. Increase the disclosure of core indicators under such topics as customer responsibility and green management to further enhance the completeness of the Report.
2. Increase the disclosure of the Company's historical key performance data to improve the comparability of the Report.

Rating Commendation

As this is the first year that China Minmetals Corporation has participated in the report rating process, and having achieved a Five-Star rating in its inaugural year, the Corporation is awarded a Bronze-level Commendation.



Rating Report for the China Minmetals Corporation Sustainability Report 2025

At the request of China Minmetals Corporation in its first year of engagement, the *Chinese Expert Committee on Corporate Social Responsibility (CSR) Report Rating* appointed a panel of experts to form a rating team to evaluate the *China Minmetals Corporation Sustainability Report 2025* (hereinafter referred to as "the Report").

I. Rating Basis

1. *Guidelines on Central State-Owned Enterprises Fulfilling Social Responsibilities with High Standards in the New Era*;
2. *Corporate Sustainability Disclosure Standards – Basic Standards (Trial)*;
3. *China Corporate Sustainability Report Guide (CASS-ESG 6.0) – Non-ferrous Metal Mining and Beneficiation Industry*;
4. *China Corporate Sustainability Report Rating Standards (2026)*.

II. Rating Analysis Process (★★★★★)

The Party Leadership Group of China Minmetals serves as the highest governing body for sustainability, exercising overall management over social responsibility work. The Brand and Social Responsibility Task Force has been established as the social responsibility leadership body. The Party-Mass Work Department acts as the coordinating department for social responsibility work, with the Brand and Culture Division (Social Responsibility Division) serving as the responsible office. In preparation for the Report, preliminary research was conducted and special notices were issued to guide the compilation process. Research interviews were carried out with multiple headquarters departments and directly-managed enterprises to ensure the comprehensiveness and accuracy of the Report. The Corporation actively promotes the publication of annual ESG reports by its listed subsidiaries and has achieved full coverage, demonstrating an excellent process performance.

Materiality (★★★★★)

The Report systematically discloses key topics for the non-ferrous metal mining and beneficiation industry, including climate change response, pollutant emissions, biodiversity and land use, improvement of mining recovery and beneficiation recovery rates, intelligent mining, sustainable supply chains, product/service safety and quality, occupational health and safety, sustainable governance mechanisms, and anti-bribery and anti-corruption. These topics are addressed in substantial detail, with occupational health and safety (6 pages), sustainable governance mechanisms (6 pages), and climate change response (5 pages) receiving the most extensive coverage, reflecting an excellent performance in materiality.

Completeness (★★★★☆)

The Report's main content is structured around the following chapters: "More Advanced: Surging Momentum of Innovation," "Higher Quality: Enhancing Industrial Development and Efficiency," "More Robust: Improving Governance and Management," "More Sustainable: Consolidating Ecological Security," "More Caring: Creating a Happy Workplace," and "More Inclusive: Harmonious Progress for All." Together, these sections systematically disclose 88.32% of the core indicators for the non-ferrous metal mining and beneficiation industry. Notably, 100% coverage of core indicators is achieved in the following areas: strengthening communication and dissemination under the responsibility management dimension; governance responsibility and innovation-driven development under the intrinsic responsibility dimension; rural revitalization and social contribution under the social responsibility dimension; pollution prevention under the environmental responsibility dimension; and fulfillment of overseas social responsibilities under the overseas social responsibility dimension. This demonstrates a leading performance in completeness.

Balance (★★★★★)

The Report discloses negative data and information, including "year-on-year change in the number of environmental administrative penalties" and "year-on-year change in the number of general production safety liability accidents" and "year-on-year change in the number of fatalities." It also briefly describes the situation of "continuously deepening the special campaign on 'fall prevention,' and through enhanced training and increased penalties, achieving a 66.7% year-on-year reduction in fall accidents." This reflects an excellent performance in balance.

Comparability (★★★)

The Report provides detailed comparative data for 20 key indicators over a continuous 4-year period, including "operating revenue," "total tax paid," "number of female employees," "safety production investment," "sulfur dioxide emissions," and "water reuse rate." The most comprehensive 4-year comparable data disclosures are found in the following areas: employee responsibility under the social responsibility dimension (6 data sets), pollution prevention under the environmental responsibility dimension (3 data sets), and governance responsibility under the intrinsic responsibility dimension (3 data sets). The Report also makes horizontal comparisons, citing its "ranking 86th in the Fortune Global 500," "tungsten, crystalline graphite, and bismuth resources ranking among the top globally; lithium, potassium, zinc, lead, antimony, chromium, and fluorite resources or production ranking among the world's top

tier; and copper, iron, nickel, cobalt and other resources ranking among China's top tier." Nevertheless, the comparability performance requires further improvement.

Readability (★★★★★)

The Report adopts a topic-based framework, structured around six major chapters that comprehensively elaborate on the Corporation's annual responsibility practices and achievements. The framework is clearly structured and highlights key topics. The cover design is simple and fresh, with diverse presentation elements that enhance readability. The inclusion of "Knowledge Tips" to explain industry-specific terminology improves accessibility. The integration of QR codes for multimedia extensions enhances both readability and stakeholder engagement. The Report demonstrates an excellent performance in readability.

Innovation (★★★★★)

The Report opens with two "Responsibility Spotlights": "Seventy-Five Years of Forging the Backbone of the Mining Industry, Striving for the '15th Five-Year Plan' to Build a Pillar of National Strength" and "Painting a Beautiful Picture of Rural Landscapes, Writing a New Chapter of Rural Revitalization," showcasing China Minmetals' remarkable journey and contributions over its 75-year history, as well as its key initiatives and achievements in rural revitalization during the "14th Five-Year Plan" period. The Corporation has prepared country-specific responsibility reports and promoted the publication of annual ESG reports by its listed subsidiaries, thereby establishing a multi-tiered reporting system. As a first-time participant in the report rating process, the Corporation has enhanced its awareness and strategic approach to sustainability management, while improving the standardization and credibility of its sustainability work. This demonstrates an excellent performance in innovation.

III. Comprehensive Rating (★★★★★)

Based on the evaluation by the rating team, the China Minmetals Corporation Sustainability Report 2025 has been rated as Five-Star, representing an excellent corporate sustainability report.

Rating Result	Rating Graphic	Development Level
Five-Star Plus	★★★★★+	Exemplary
Five-Star	★★★★★	Excellent
Four-Star Plus	★★★★☆	Leading
Four-Star	★★★★	Outstanding
Three-Star	★★★	Good
Two-Star	★★	Developing
One-Star	★	Foundational

IV. Recommendations for Improvement

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V. Rating Commendation

As this is the first year that China Minmetals Corporation has participated in the report rating process, and having achieved a Five-Star rating in its inaugural year, the Corporation is awarded a Bronze-level Commendation.



Scan the QR code to view the rating archive

黄群慧
Vice Chairperson of the Rating Expert Committee

钟宏武
Rating Team Leader

魏香丽
Rating Team Experts

Date of Issue:
July 16, 2026

Feedback

Dear readers:

Dear Reader,

Thank you very much for reading this report. To further improve the quality and standard of the *China Minmetals 2025 Sustainability Report*, we welcome your valuable comments and suggestions on this report. We will carefully consider your comments and suggestions and protect your feedback from access by any third party.

1. Your overall impression of the sustainability report:

☐ Very good ☐ Good ☐ Fair ☐ Poor ☐ Very poor

2. Do you think this report reflects China Minmetals’ significant impacts on the economy, society, and the environment:

☐ Yes ☐ No

3. What do you think about the clarity, accuracy and completeness of the information, data and indicators disclosed in this Report:

☐ Very high ☐ High ☐ Average ☐ Low ☐ Very low

4. How do you assess the structure and organization of this Report:

☐ Very reasonable ☐ Reasonable ☐ Fair ☐ Poor ☐ Very poor

5. Do you think the layout and design of this report are easy to read:

☐ Yes ☐ No

Open-ended Questions:

1. Which topics in this report are of greatest concern to you?

2. What additional information do you believe should be disclosed in this report that you would like to understand further?

3. What comments and suggestions do you have on China Minmetals’ sustainability work?

If convenient, please provide your information:

Name: _____ Occupation: _____ Organization: _____ Contact Address: _____

Postcode: _____ Email: _____ Tel: _____ Fax: _____