



五矿新能源材料(湖南)股份有限公司  
MINMETALS NEW ENERGY MATERIALS(HUNAN) CO.,LTD



# 2024

## Environmental, Social and Governance (ESG) Report

Minmetals New Energy Materials (Hunan) Co., Ltd.

Stock Code: 688779

Stock Short Name: MINMETALS NEW ENERGY



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# About this Report

This is the fourth Environmental, Social and Governance (ESG) Report released by Minmetals New Energy Materials (Hunan) Co., Ltd. (hereinafter referred to as "Minmetals New Energy", the "Company", or "we"). This report is prepared in an objective, standardized, transparent and comprehensive manner to fully disclose the specific measures, major practices, highlight cases and key performances in proactively assuming social responsibilities and executing effective management of ESG risks and opportunities by Minmetals New Energy in 2024, with a view to proactively responding to the intended expectations of stakeholders and fulfilling its social responsibilities more efficiently.

## Time Frame

This is an annual report. Unless otherwise stated, the reporting period covers January 1, 2024 to December 31, 2024. To enhance the comparability and completeness of the report, certain sections of the report may appropriately revisit previous years or include forward-looking statements.

## Reporting Scope

This report is based on Minmetals New Energy as the main reporting entity, including its branches and subsidiaries. Unless otherwise stated, the scope of this report is consistent with the consolidated financial statements of the Company's annual financial report.

## References

This report is prepared in accordance with guidelines set forth in the Guiding Opinions on State-owned Enterprises Fulfilling Social Responsibilities Better and the Reference Indicator System for ESG Reports of Listed Companies Controlled by Central Enterprises (ESG Reports Indicator System for Central Enterprises) issued by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council, the Guidelines No. 1 of the STAR Market of Shanghai Stock Exchange for Self-regulation of Listed Companies — Standardized Operation (Revised in December 2023), the Guidelines No. 14 of Shanghai

Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial), the Guidelines No. 13 of the STAR Market of Shanghai Stock Exchange for Self-regulation of Listed Companies — Preparation of Sustainability Reports, the Sustainability Reporting Standards (GRI Standards) released by the Global Sustainability Standards Board (GSSB), and the Sustainable Development Goals (UN SDGs 2030).

## Data Source & Assurance of Reliability

All information and data cited in this report are primarily derived from internal documents of Minmetals New Energy or relevant public sources. Minmetals New Energy guarantees that this report contains no false records, misleading statements, or material omissions, and assumes individual and joint responsibility for the authenticity, accuracy, and completeness of its contents.

## Monetary Unit

Unless otherwise indicated, all monetary amounts are listed in RMB for this report.

## Report Accessibility

This report can be accessed and downloaded via the official website of Minmetals New Energy (<http://www.cylico.com/>) and the website of the Shanghai Stock Exchange (<https://www.sse.com.cn>).

## Comments & Feedback

If you have any comments or suggestions regarding the contents of this report or the Company's ESG performance, please feel free to contact us via the following contact information. Any valuable comment and suggestion will help us further improve this report.

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Names and Abbreviations

Abbreviation	Full Name
China Minmetals	China Minmetals Corporation
Minmetals New Energy / the Company / We	Minmetals New Energy Materials (Hunan) Co., Ltd.
Former company name: Changyuan Lico	Former company name: Hunan Changyuan Lico Co., Ltd.
Minmetals Capital	Minmetals Capital Co., Ltd.
CRIMM	Changsha Research Institute of Mining and Metallurgy Co., Ltd.
LICO Technology Corp.	LICO Technology Corporation (Taiwan, China)
Gold Shine Energy	Gold Shine Energy Material Co., Ltd.
Changyuan New Energy	Hunan Changyuan Lico New Energy Co., Ltd.

Message from Chairman



2024 is a pivotal year for advancing the modernization of China on all fronts. This year, the Company adhered to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, thoroughly implemented the requirements of the Central Economic Work Conference, actively practiced the new development concept of economic development, innovation-driven, people's well-being, green ecology, and security, adhered to the general work tone of seeking progress in stability, promoting stability through progress, and establishing before breaking, adhered to the original mission, deepened the main responsibilities and main business, focused on value creation, and continued to deepen reforms, and made every effort to promote the high-quality development of the Company together with many partners, to contribute the "Strength of Minmetals New Energy" to the progress of the industry and the sustainable development of society.



Under the background of global energy structure transformation, the new energy cathode material industry has ushered in unprecedented development opportunities. As a pioneer and leader in the cathode material market, Minmetals New Energy is fully aware of the responsibilities and missions it shoulders. The Company deeply integrates ESG concept into corporate strategy, not only to respond to the call for global sustainable development, but also to lead the cathode material industry to a greener, more efficient and sustainable direction.

**In our 2024 journey, we remained unwavering in our commitment to green development.** The Company coordinated high-quality development and high-level environmental protection, actively and steadily advanced carbon peak and carbon neutrality initiatives, intensified efforts to prevent and control pollution, so as to coordinate the promotion of carbon reduction, pollution prevention and control, ecological conservation, and economic growth. We have strictly implemented the primary responsibility of ecological environmental protection, established and improved the ecological environment management system, consolidated the foundation of environmental risk prevention and control, and strictly adhered to the bottom line of ecological environment risk, to constantly consolidate and expand the achievements of pollution prevention and control. Simultaneously, we vigorously promoted energy conservation, carbon reduction, and efficiency improvement initiatives, actively drove the transition to a cleaner and low-carbon energy structure, and consistently enhanced the efficiency of energy and resource utilization, to deeply root the principles of green, low-carbon, and environmental protection practices into every aspect of production, operation, and management. We have not only completed carbon footprint certification and full life cycle assessment for our core products, but also made solid progress in energy conservation and carbon reduction across multiple areas including raw material procurement, technological R&D innovation, equipment upgrades, manufacturing processes, production optimization, and project planning. Meanwhile, the Company has actively organized campaigns such as "National Energy Conservation Week" and "National Low-Carbon Day", and injected strong momentum into building a Beautiful China and achieving the "Dual Carbon" goals by leveraging digital and intelligent technologies such as energy online monitoring and MES systems. On the path of green development, we take concrete actions to shoulder our corporate responsibilities and mission. Every detail we optimize and every innovation we make embodies our aspirations for a brighter future and our profound commitment to protecting our planet.

**In the new chapter of 2024, we've been upholding our social responsibilities with resolute strides, demonstrating the mission and commitment of a central SOE.** The Company always keeps in mind "the most fundamental priorities of the nation" and is fully committed to the strategic development of the country's new energy industry. We have intensified investments in R&D of core technologies, striving to accelerate the cultivation and development of new-quality productive forces, aiming to reach new heights in achieving self-reliance and strength in science and technology. We firmly believe that while creating economic benefits, enhancing social value is equally important. We are committed to ensuring that the fruits of development are shared with the broader society. The Company actively organizes various public welfare

initiatives, such as donating relief supplies, supporting education, facilitating university-enterprise collaborations, promoting blood drives, and participating in afforestation efforts, and continuously dedicates itself to targeted assistance in designated regions. We help consolidate and expand the results of poverty alleviation, and promote its deep integration with the rural revitalization strategy, to jointly draw a beautiful picture of prosperity and development. On the path of strengthening the Company through talent development, the Company always prioritizes employees' health, safety, and personal growth. We actively promote the philosophy of "Efficient Work, Healthy Living" and diligently foster a warm and harmonious "Home for Employees". By organizing diverse cultural and sports competitions, we continuously optimize the work environment for employees, effectively enhancing their sense of fulfillment, happiness, and security. This reflects not only our care for individual employees but also our profound commitment to corporate culture, demonstrating our steadfast dedication to building a harmonious enterprise.

**In 2024, we courageously benchmarked ourselves against world-class enterprise standards and continuously enhanced our modern governance capabilities through reform and innovation.** We thoroughly implement the principle of "maintaining the two consistencies", and comprehensively advance institutional improvement, structural optimization, and organizational adjustment, to ensure the deep integration of Party leadership with the corporate governance system. In close alignment with the strategic directives of the SASAC of the State Council and China Minmetals regarding the new round of state-owned enterprise reform and enhancement initiatives as well as the world-class enterprise value creation campaign, we have undertaken coordinated planning to advance the Company's comprehensive deepening reform and world-class enterprise development.



We focus on the development vision of "product excellence, brand distinction, innovation leadership, and modern governance", continuously strengthening the Company's core competitiveness, consolidating and enhancing core business capabilities. We vigorously reinforce our headquarters' strategic execution capacity in "oversight and coordination", fully leveraging the comprehensive functions of internal control, risk prevention, and compliance operations to ensure the Company's steady and sound performance.

Through the formulation and implementation of a series of policy measures that align with both current practical needs and long-term development vision, we have steadily enhanced the modern governance efficiency of the Company, driven by the dual engines of "reform" and "innovation". These initiatives aim to build a more efficient, transparent, and modern corporate governance system, laying a solid foundation for the sustainable development of the Company.

Environmental protection, social responsibility, and corporate governance are the three cornerstones of corporate sustainable development. Looking to the future, Minmetals New Energy will unswervingly follow the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, comprehensively and thoroughly implement the spirit of the 20th National Congress of the Communist Party of China, bravely shoulder the historical mission of a central SOE, and live up to the gifts of the times and the expectations of the people. We always maintain a pioneering and enterprising spirit, pressing ahead with an overwhelming sense of urgency to strive for excellence. Committed to the ambitious vision of becoming “a global leader in the new energy materials industry”, we will embark on this new journey with even greater determination, writing a new chapter of high-quality development for Minmetals New Energy and creating remarkable achievements worthy of the new era.

Minmetals New Energy Materials (Hunan) Co., Ltd.  
Liuquan Hu, Party Secretary and Chairman

# About Us

## Company Profile

Minmetals New Energy Materials (Hunan) Co., Ltd. (Abbreviation: Minmetals New Energy, Stock Code: 688779) was established in 2002. As a directly managed subsidiary of China Minmetals Corporation, a Fortune Global 500 company, it is a member of the State-Owned Enterprise Electric Vehicle Industry Alliance, the president organization of the Hunan Battery Industry Association, and the leading organization of the Changsha-Zhuzhou-Xiangtan Advanced Energy Storage Materials Industry Alliance. It was listed on the Shanghai Stock Exchange's Sci-Tech Innovation Board in August 2021.

As the core pillar of China Minmetals’ innovation-driven development strategy and the creation of "Future New Momentum", Minmetals New Energy adheres to the action guidelines, value orientation, and corporate spirit of "global mission responsibility, leadership in independent innovation, problem-oriented thinking, pursuit of excellence, and the fighting spirit to triumph". With the strategic positioning of becoming "a first-class domestic and internationally renowned new energy materials supplier", the Company focuses on its core responsibilities, upholds integrity while driving innovation, demonstrates bold commitment to excellence, and strives for world-class standards. It is dedicated to strengthening, optimizing, and expanding the Company and sharing development achievements with a broader range of stakeholders.

In the future, the Company will actively implement the new development philosophy featuring innovation, coordination, greenness, openness, and sharing, stay true to our founding aspirations and consolidate our strengths, and join hands with partners worldwide to strive resolutely toward becoming "a global leader in the new energy materials industry". We will continue dedicating ourselves to meeting the people’s growing needs for a better life, striving to serve the implementation of the national new energy vehicle strategy, and taking on responsibilities to promote high-quality economic and social development, so as to make new and greater contributions to the realization of the second Centenary Goal.



Corporate Culture

Core Values of Corporate Culture

World-class spirit of responsibility

persistence in quality improvement

leading role in independent innovation

striving spirit towards victory

problem-oriented mindset at work

Guide to action

value orientation

corporate spirit

Corporate Mission

Mission: Become a leader in the global in the new energy materials industry

Principles for Practicing Corporate Culture

Strive for excellence as employees, create first-class products, and build a first-class enterprise together

Pillars of Corporate Culture

Party building

Political leadership, integrated development, people-oriented approach, and joint contribution and shared benefits

Quality

Survive with quality, certify to gain market, succeed on details and build the future with quality

Integrity

Virtue, integrity, and pragmatism; dedication, commitment, and diligence

Talent

Opportunities for the willing, platforms for the capable, and incentives for the achievers

Safety

Safety is the greatest saving, and accidents are the greatest waste

Customer

View the market with sincerity, and treat customers with honesty

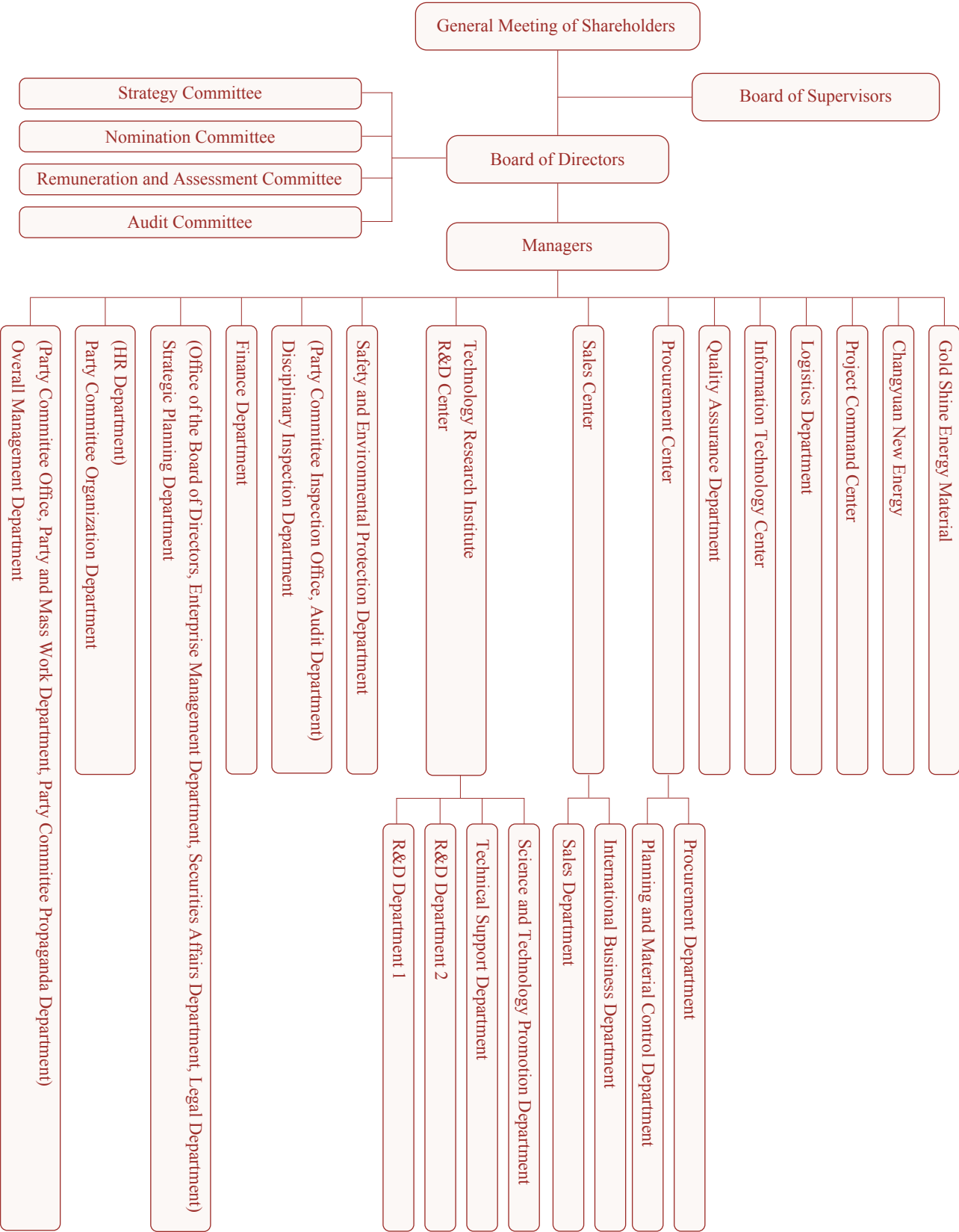
Compliance

Compliance creates value, and compliance is everyone's responsibility

Innovation

Technological innovation drives high-quality enterprise development

Organizational Structure





Business Overview

The Company focuses on the R&D, manufacturing and sales of highly efficient battery materials. Its main products include multi-element material precursors, multi-element cathode materials, and LFP, LCO and other cathode materials for lithium batteries and nickel metal hydride batteries. The Company owns a complete product system covering multi-element material precursors for lithium batteries, multi-element cathode materials for lithium batteries and LFP cathode materials and has always taken a lead in market share of power-supplying ternary materials. The Company is headquartered in Changsha, Hunan Province, and operates three production bases in High-tech, Lugu, and Tongguan, with an annual production capacity of 120,000 metric tons of ternary cathode materials, 60,000 metric tons of lithium iron phosphate cathode materials, 30,000 metric tons of precursors, and 5,000 metric tons of waste battery recycling.

Leveraging the long-term resource security advantages and full-industry-chain strengths in nickel, cobalt, manganese, lithium and other key materials under China Minmetals Corporation, the Company has established robust R&D capabilities through quality-focused operations, talent aggregation, and dedicated research. It has mastered advanced technologies including precursor synthesis, cathode material production, and spent battery recycling, recognized as a National Intellectual Property Advantage Enterprise and a National High-Tech Enterprise, held 161 patents and operated both a National-level Enterprise Technology Center and a Postdoctoral Research Workstation. The Company's products represent the development direction of high-performance lithium-ion battery cathode materials. Single-crystal ternary and high-nickel materials enjoy a high reputation in the industry, and the product technology is at the international advanced level. The Company has acquired certifications of ISO 9001 Quality Management Systems, ISO 14001 Environment Management Systems, ISO 45001 Occupation Health and Safety Management Systems, ISO 50001 Energy Management Systems, ISO 27001 Information Safety Management Systems, IATF 16949 Automotive Quality Management System and IPR Management System.

Milestones

Year	Milestones
2002	CRIMM and Lico Technology Corp. set up a joint venture company, mainly producing lithium cobalt oxides
2014	Become a wholly-owned subsidiary of Minmetals Capital (formerly Jinrui Technology), a listed company
2017	7,000-metric-ton project assets of Changyuan Lico, Jinchi Energy, and CRIMM were restructured to form the new Changyuan Lico.
2018	Became a directly managed subsidiary of the Group Successfully introduced equity capital of RMB 1.7 billion from 11 strategic investors including Guoxin, SAIC and BAIC
2019	The Company completed the shareholding system reform and was renamed as Hunan Changyuan Lico Co., Ltd. Implemented an employee stock ownership plan, with 126 employees investing RMB 183 million to hold 4.07% of the Company’s shares
2021	Successfully listed on the STAR Market (Stock Code: 688779)
2024	Renamed as Minmetals New Energy Materials (Hunan) Co., Ltd.



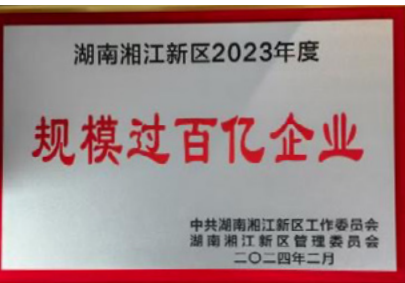
High-Quality New Energy  
Enterprises in China in 2024



State-Owned Asset  
Transaction Compliance  
Model Enterprises in 2024



Enterprise with Revenue Exceeding RMB 10 Billion



Best Corporate Governance  
Award for Listed Companies  
in 2024



Strategic Partner of the Year 2024






May Day Labor Medal Award of Affiliates  
Directly Under Hunan Province



# ESG Management

## Governance

Minmetals New Energy has established a three-tier ESG management system comprising "Decision-Making of Board of Directors – Strategy Committee Management – ESG Working Group Execution", achieving a well-defined, efficient, and collaborative organizational structure to provide solid governance for ESG initiatives.

Level	Personnel	Responsibilities
 Decision-making organ	<b>Board of Directors</b>	Identify and evaluate the Company’s ESG risks, formulate ESG-related guidelines, policies, systems and goals, review proposals and make decisions on ESG-related matters, and supervise and appraise the practice of ESG-related matters.
 The Management	<b>BOD’s Strategy Committee</b>	Implement BoD’s ESG-related decisions and policies, examine the Company’s ESG risks, carry out and promote specific ESG matters, and regularly report to BoD about the progress of ESG-related matters.
 Executive Level	<b>ESG Working Group</b>	Regular collection, reporting, and review of ESG information; Focus on improving the efficiency of ESG data management and control while enhancing the effectiveness of ESG efforts, ensuring their efficient execution and implementation.



Strategy

The fundamental principle of the Company is to “keep developing cathode materials for lithium-ion batteries as the main business, adhere firmly to diversified industrial distribution policy and insist on the global development direction”. The Company’s strategic positioning is to become “a new energy material supplier which is first-class in China and well-renowned in the world”. Guided by market orientation and based on precise market analysis, the Company allocates resources rationally, defines its future development path, and formulates its development strategy by taking into account both internal and external environments as well as its own strengths.

Constructing and Improving the Business Portfolio

Aiming to drive diversified development in the cathode materials industry, the Company is strengthening its deployment of cutting-edge products based on its existing businesses in ternary cathode materials, lithium iron phosphate (LFP) cathode materials, lithium cobalt oxide (LCO) cathode materials, and spherical nickel. It is actively building an integrated industrial chain covering raw material security, material production, and recycling, improving its overall industry layout and enhancing its comprehensive competitiveness and influence in the sector.

Stabilizing Domestic Market and Going to the World

The Company adheres to its world-class mission and responsibility. Building on the existing stable partnerships with current customers, it continues to expand collaborations with top-tier domestic power battery manufacturers while strengthening its presence in the international market by actively competing and engaging with global peers. Beyond cooperation of production and sale and technical research and development cooperation, the Company explores diversified approaches to establish strategic alliances with key partners.

Promoting Industry-finance Integration Continuously

The Company has strong financing capabilities with access to diverse equity and debt financing instruments, which will effectively support its technological advancement, capacity expansion, and rapid business growth.

Implementing a Cost-first and Technology-first Strategy

Costs construct a core competitiveness of a company. We keep pushing forward total cost management and control, plan carefully on budgets and expenditures to ensure that each penny is spent wisely to play a better role, and put an end to waste.

Technology innovation is the fundamental guarantee of a company’s competitiveness. The Company keeps investing on technological R&D and optimizing its core products. Active efforts have been made to develop cutting-edge products and explore future technological directions.


Risk, Influence and Opportunity Management

Issue	Expected Risks and Opportunities	Countermeasures
Products and Services	Product quality risks and inadequate after-sales handling may lead to customer attrition.	The Company will continuously optimize the quality inspection and control system, advance quality information system development, promote a quality-centric culture, and improve product after-sales services.
Data security and customer privacy protection	Technical risks and management risks may lead to customer privacy breaches, resulting in customer churn and potential lawsuits.	The Company will adopt the mitigation measures including implementing anti-leakage systems, performing regular system updates, enhancing employee awareness of data security protection, and conducting penetration tests along with emergency response drills.
Supply Chain Management	Supply disruptions, inventory risks, and other factors may compromise the stability of the Company's supply chain, thereby affecting product delivery.	The Company will strengthen supply chain management, practice responsible procurement, diversify supply chain structures, and adopt digital traceability platforms.
Innovation-driven development	Technological disruption risks and talent shortage/attrition risks may cause companies to lose competitiveness in the industry.	The Company will increase R&D investment and strengthen collaborations, optimize R&D fund management, enhance talent acquisition and development programs, and expand technology reserves.
Combating Climate Change	For details, refer to the Combating Climate Change section.	

Indicators and Targets

Presented by	AwardsAward Title
CLS	 ESG Pioneer Award

Communication with Stakeholders

Stakeholders	Stakeholders Expectations	Communication and Feedback
 Government and Regulatory Agencies	<ul style="list-style-type: none"><li>Regulatory compliance in business practices</li><li>Integrity construction</li><li>Intellectual property protection</li></ul>	<ul style="list-style-type: none"><li>Improve compliance system</li><li>Strengthen anti-corruption and integrity education and training</li><li>Intellectual property protection system</li></ul>
 Shareholders and Investors	<ul style="list-style-type: none"><li>Improving corporate governance</li><li>Protecting shareholders' rights and interests</li><li>Investor relations management</li><li>Information disclosure</li><li>Risk management</li></ul>	<ul style="list-style-type: none"><li>Enhancing operation management level</li><li>Investor research and exchange</li><li>Publishing periodic report, interim announcement and performance presentation</li><li>Overall risk management</li></ul>



Stakeholders	Stakeholders Expectations	Communication and Feedback
<div> Customers</div>	<ul style="list-style-type: none"><li>• Technological Innovation</li><li>• Customers' rights and interest</li><li>• Product quality and safety</li></ul>	<ul style="list-style-type: none"><li>• R&amp;D management system</li><li>• Customer satisfaction survey and complaint channel</li><li>• Strict governance and management</li><li>• Safeguard information security</li></ul>
<div> Suppliers and Partners</div>	<ul style="list-style-type: none"><li>• Supply chain management</li><li>• Fair competition</li><li>• Integrity and mutual benefit</li></ul>	<ul style="list-style-type: none"><li>• Improve the purchasing system</li><li>• Fulfilling contract with integrity</li><li>• Signing collaborative agreement</li></ul>
<div> Employees</div>	<ul style="list-style-type: none"><li>• Guarantee of basic rights and benefits</li><li>• Individual development</li><li>• Employee benefits</li><li>• Employee care</li></ul>	<ul style="list-style-type: none"><li>• Establishing fair promotion paths</li><li>• Professional training and career development</li><li>• Employee satisfaction survey</li><li>• Implementing workplace safety</li><li>• Routine communication</li></ul>
<div> Environment</div>	<ul style="list-style-type: none"><li>• Green and low-carbon development</li><li>• Protecting the ecological environment</li></ul>	<ul style="list-style-type: none"><li>• Green transformation development</li><li>• Green technology innovation</li></ul>
<div> Communities and Public</div>	<ul style="list-style-type: none"><li>• Taking part in rural revitalization</li><li>• Supporting education</li></ul>	<ul style="list-style-type: none"><li>• Partnership and cooperation</li><li>• Consumption aid</li><li>• Donation for education</li></ul>

## Material Issues

Minmetals New Energy places high importance on the expectations and demands of stakeholders. Based on the two dimensions of "financial materiality" and "impact materiality", the Company systematically identifies key ESG issues and future development directions, and analyzes and evaluates the importance of the issues through a four-step process: "conducting background research → establishing an issue list → assessing and confirming materiality → reviewing and finalizing issues".

Analysis Steps	Description
Conducting background research	Clarify the Company's business scope, operational areas, and stakeholder groups; identify potential issues through the collection and analysis of policies and regulations, industry information, peer practices, and capital market concerns.
Establishing a list of issues	Through communication with stakeholders such as government and regulatory authorities, shareholders and investors, customers, suppliers, and partners, the Company gains a full understanding of internal and external stakeholders' views on material issues, identifies impacts, risks, and opportunities, and compiles them into an issue list.
Evaluating and confirming materiality	Financial materiality and impact materiality assessments are conducted, considering national policies, capital market focus areas, and industry benchmarks, to generate material issue analysis results.
Issue review and confirmation	The Management of the Company reviews and confirms the results of the materiality analysis and defines key objectives and implementation plans for future ESG management efforts.

Following verification by the Company's Board of Directors and external experts, Minmetals New Energy has identified the following as material issues, which will serve as key priorities for corporate management and reporting disclosure.



Corporate Governance

Governance Topics	Social Topics	Environmental Topics
Anti-commercial Bribery and Anti-corruption	Data Security and Customer Privacy Protection	Environmental Compliance Management
Protecting Shareholders' Rights and Interests	Supply Chain Management	Pollutant Emissions and Waste Disposal
Anti-unfair Competition	Products and Services	Ecosystem and Biodiversity Protection
ESG Governance	Intellectual Property Protection	Circular Economy
Leading Role of Party Building	Employees' Rights and Interests and Employee Care	Clean Energy Opportunities
Corporate Governance	Employee Training and Development	Water Utilization
Compliance and Risk Management	Social Contribution	Energy Utilization
	Workplace Safety	Combating Climate Change
	Innovation-driven Development	





# 01

## Environmental Section Harmony with Nature, Empowerment through Ecology

Upholding the philosophy of "Green Leadership, Low-Carbon Development, and Co-Creating a Sustainable Future", Minmetals New Energy takes proactive steps in energy utilization, water resource management, circular economy, ecological conservation, and climate change action. By establishing robust management systems, setting science-based targets, and implementing diversified initiatives, the Company strives to balance business growth with energy conservation and carbon reduction. While achieving its own growth, it also contributes to promoting industry green transformation and supporting sustainable development.





# Optimizing Resource Management

## Energy Use

The Company places high importance on energy conservation and consumption reduction, and has revised and improved nine environmental protection management systems, including the Measures for the Administration of Accountability System for Energy Conservation and Ecological Environmental Protection and the Measures for the Administration of Statistical Reporting of Energy Conservation and Ecological Environmental Protection by strictly complying with the Energy Conservation Law of the People's Republic of China, the Water Law of the People's Republic of China, and the Circular Economy Promotion Law of the People's Republic of China. All subsidiaries have established energy management systems, set up dedicated energy management departments, and formed professional teams for energy statistics and management. The Group strictly adheres to the statistical standards and accounting methodologies for energy consumption and carbon emissions, and conduct statistical analysis of energy conservation and emission reduction monitoring data, carry out regular monitoring and evaluation, and rigorously implement performance assessments.

The Company has set an energy conservation target of reducing the comprehensive energy consumption per unit product by 10% compared to 2022 by 2030. In 2024, the Company headquarters and two subsidiaries obtained certification of ISO 50001:2018 Energy Management Systems; and the comprehensive energy consumption per unit product decreased by 2% compared with 2022, achieving the predetermined target for 2024.

The Company has taken multiple measures to promote energy conservation and improve energy efficiency:

### Purchasing Energy-efficient Production Equipment

The Company continues to strengthen procurement controls for key energy-efficient equipment. For newly purchased energy-efficient equipment in new, renovation, or expansion projects, it is required that the bidding documents and contracts explicitly state that the energy efficiency of the purchased equipment must meet Level 2 or above standards.

### Utilization of Waste Heat, Waste Pressure, and Energy Cascading

The Company is actively promoting the recovery and utilization of industrial waste heat. Its subsidiary Changyuan Lico New Energy invested RMB 960,000 to recover waste heat from kiln flue gas in the cathode material workshop, which is now used for heating and hot water supply in office buildings, canteens, and dormitories, saving approximately 6 million kWh of electricity annually.

### Clean Energy and Green Power Trading

The Company actively promotes the clean and low-carbon transformation of its energy structure, vigorously advancing the construction of distributed photovoltaic projects. Meanwhile, its subsidiaries actively participate in green electricity market transactions to increase the proportion of renewable energy, and reduce the proportion of fossil energy by optimizing power resource allocation and actively consuming green electricity. Throughout the year, the Company consumed a total of 198.93 million kWh of renewable energy and purchased green electricity certificates equivalent to 4.71 million kWh. Renewable electricity accounted for 28% of the Company's total power consumption, with some products already achieving 100% renewable energy use.

Case

Distributed Photovoltaic Construction

During the reporting period, the two subsidiaries comprehensively advanced the construction of rooftop distributed photovoltaic power generation projects with a total installed capacity of 5.29 MW. By developing and utilizing clean energy, the projects generated a total of 3 million kWh of electricity annually, equivalent to reducing carbon dioxide emissions by 1,577 metric tons.





Intelligent Workflow

The Company has established a comprehensive intelligent system, including a manufacturing execution system, warehouse management system, automated material handling system, and production reporting system. The operational safety and production efficiency are enhanced through intelligent functions such as automated material requests, AGV cart delivery, real-time positioning & tracking, and anomaly alerts.

Green Office

The Company is fully committed to promoting energy conservation and green office initiatives, striving to create an environmentally friendly workplace. Regarding air conditioning usage, the Company has set clear temperature limits: a minimum of 26°C in summer and a maximum of 20°C in winter, alongside regular maintenance to ensure energy conservation operation. For office operations, an electronic document management and sharing system has been established to advance paperless offices. For commuting, the Company provides pure-electric shuttle buses and encourages employees to prioritize public transportation.

Meanwhile, the Company actively carries out diverse energy conservation awareness campaigns to enhance employees’ conservation, environmental protection, and ecological awareness. Firstly, during the “Energy Conservation Week” and “National Low-Carbon Day” campaigns, various subsidiaries organize theme-based activities, such as putting up posters and displaying energy-saving and low-carbon promotional videos on cafeteria digital screens; Secondly, both online and offline channels, including WeChat groups, digital display screens, banners, posters, and themed meetings are fully utilized to promote eco-friendly, resource-efficient, and green low-carbon development concepts and theoretical knowledge. Thirdly, regular energy conservation and environmental protection training sessions are conducted, with such training incorporated into the onboarding programs for new employees.

Case Special Party Lecture on Environmental Protection

Liuquan Hu, Party Secretary and Chairman of the Company, delivered a special party lecture entitled "Reviewing General Secretary Xi Jinping's important guidelines on workplace safety and Xi Jinping Thought on Ecological Civilization, so that the concepts of safety and green development can be internalized".



Green Buildings

The newly constructed project of the Company was strictly designed and implemented in accordance with energy conservation building technical standards and specifications, featuring photovoltaic panel systems on the roof, insulated decorative integrated panels for exterior walls, and thermal-break aluminum alloy windows. The subsidiary Changyuan Lico New Energy has implemented sunken green spaces, landscape water features with rainwater retention functions, and water-saving micro-sprinkler irrigation for green space maintenance. Zoning control and infrared sensing control are adopted for public space lighting to practice the concept of green development.

## Water Use

The Company is committed to building a water resource-saving enterprise, strictly complying with laws and regulations such as the Water Law of the People's Republic of China and the Law of the People's Republic of China on the Prevention and Control of Water Pollution, and has established management systems including Water, Electricity, Steam, and Natural Gas Usage Management Regulations and Energy Measurement Management Regulations. By optimizing the precursor production process to reduce water consumption per unit product, and adopting water-saving technologies and equipment such as circulating water systems, high-efficiency cooling devices, and MVR systems, the freshwater usage and wastewater discharge can be minimized. Additionally, internal awareness campaigns, such as posting water conservation signs in domestic water use areas, help enhance employees' awareness of water resource management.

### Water Conservation Target

Achieve **95%** water reuse rate by 2030

### Water Conservation Results

Treated **630,000** metric tons of wastewater  
Recycled **600,000** metric tons of condensate water  
Achieved **94.23%** water reuse rate

## Circular Economy

The Company strictly implements the requirements of sustainable development, continuously establishes and improves the circular economy system in accordance with the Circular Economy Promotion Law of the People's Republic of China, takes various measures to reduce resource consumption, minimize waste generation and emissions, and enhance waste reuse and recycling. Firstly, implement strict requirements for material collection, prohibit excessive requisition and idle waste. Secondly, establish a full life cycle management system for waste, including detailed classification, recycling, treatment, and reuse, to promote resource recovery and maximize resource conservation and utilization, supporting the Company's green and sustainable development.

The Company enhances resource utilization and reduces waste generation by recycling sagger and ton bags, fostering the development of an internal circular economy system.

### Recovery and Recycling

Additionally, it continues to advance the resource recycling of metal renewable resources and improves the recycling technology for used batteries. In 2024, the Company completed the construction of an intelligent disassembly demonstration line for retired power battery packs and achieved stable operation. Simultaneously, the Company pushes carbon emission requirements down the supply chain while actively collaborating with circular material suppliers to source recycled inputs.

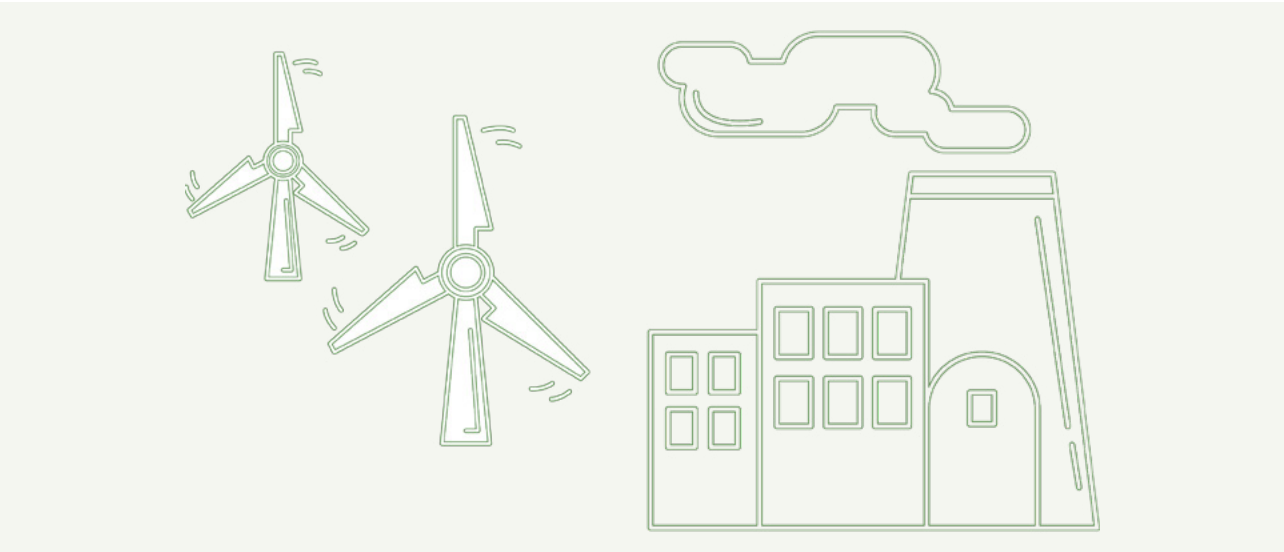
In line with regulations such as the Measures for the Administration of Solid Waste, Idle and Measures for the Administration of Waste Material Disposal, Raw Material Pallet Recycling, Recycled Pallet Cleaning, and Recycled Pallet Limit Samples, the Company standardizes the recycling and reuse of waste and used pallets to conserve resources.

### Material Usage

The Company continuously optimizes the loading specifications in the sintering process, increasing the material weight per sagger for certain product types, thereby reducing sagger consumption and waste generation.

### Reduction and Light-weighting of Packaging Materials

Additionally, by repurposing and reallocating resources based on bag needs, the Company has minimized the use of aluminum foil bags and bulk plastic ton bags.





# Practicing the Thought on Ecological Civilization

## Environmental Compliance Management

Minmetals New Energy complies with regulations including the Environmental Protection Law of the People's Republic of China, the Environmental Impact Assessment Law of the People's Republic of China, and the Measures for the Administration of Energy Conservation and Ecological Environmental Protection, and has also established a series of management protocols such as the Measures for the Administration of Accountability System for Energy Conservation and Ecological Environmental Protection and the Management Practices of Energy Conservation.

In order to thoroughly study and implement Xi Jinping Thought on Ecological Civilization and comprehensively and accurately implement precise, scientific and legal pollution control, the Company has established a workplace safety and energy conservation and environmental protection committee, and set up a safety and environmental protection department to be responsible for the implementation of specific environmental protection. The Company continues to establish and improve the energy conservation and environmental protection accountability system, formulates an accountability checklist, and signs target accountability agreements with subsidiaries to promote their fulfillment of primary responsibilities in this regard. Various subsidiaries establish a clearly defined and properly allocated energy conservation and environmental protection responsibility system through organizational structure setup and institutional development, ensuring responsibilities are assigned to specific positions and individuals. Meanwhile, regular ecological and environmental risk assessments are conducted, with corresponding control measures formulated based on evaluation results, forming a comprehensive and efficient energy conservation and environmental protection governance system to ensure standardized and consistent implementation.

Holding the 2024 Safety and Environmental Protection Work Conference



The Company maintains regular communication with local government regulators, customers, and other stakeholders to understand their expectations and requirements regarding environmental management, and promptly incorporates their feedback into the Company's management framework. Additionally, the Company has established an effective communication mechanism with neighboring communities, actively monitoring residents' feedback and addressing concerns proactively to prevent any potential inconvenience caused by environmental management shortcomings, and earnestly fulfilled the corporate social responsibility, to promote the harmonious coexistence between the enterprise and the community.

In terms of environmental risk management, the Company conducts regular identification and updates of environmental factors and implements corresponding control measures. To efficiently respond to sudden environmental incidents, enhance emergency response capabilities, and strengthen the capability to prevent and handle environmental pollution events, all subsidiaries have developed Emergency Plans for Environmental Incidents in line with their actual production conditions, which have been filed with the competent ecological and environmental authorities. In 2024, the Company organized a total of 9 emergency response drills covering scenarios such as wastewater leaks, solution spills, and hazardous waste incidents. Among these, in December, the Company jointly conducted a "Fire-Induced Firefighting Wastewater and Solution Leak Emergency Drill" with the Changsha Municipal Ecology and Environment Bureau. These practical exercises have strengthened the Company's environmental risk awareness and emergency response capabilities.

In 2024, the Company and its two subsidiaries successfully maintained Certification of ISO 14001:2015 Environmental Management Systems, had no general or above-level environmental pollution incidents, no penalties imposed by ecological and environmental authorities, and no major environmental compliance violations, and completed the annual environmental management objectives, including "zero major energy conservation and environmental protection violations, zero environmental administrative penalties, compliance with wastewater, exhaust gas, and noise emission standards, and 100% safe disposal of hazardous waste".



Image: Certification of ISO 14001  
Environment Management Systems

Pollutant Emissions and Waste Disposal

Minmetals New Energy strictly complies with environmental protection laws and regulations such as the Environmental Protection Law of the People's Republic of China, and actively promotes comprehensive and effective treatment of wastewater, exhaust gases, noise, and solid waste. In line with the Company's practical operations, it has established management systems including the Measures for the Administration of Accountability System for Energy Conservation and Ecological Environmental Protection, Measures for the Administration of Wastewater and Exhaust Gas, Measures for the Administration of Solid Waste, and Measures for the Administration of Noise. The Company maintains a well-documented pollution source log and monitors the real-time operation of all pollution control facilities to ensure effective treatment of various pollutants.

The Company has consistently increased environmental protection investments and fully implemented targeted, science-based, and law-based pollution control. During the reporting period, the Company's energy conservation and environmental protection performance continued to improve, with all pollutants discharged meeting compliance standards, and no sudden environmental pollution incidents occurred. The wastewater is comprehensively utilized after advanced treatment, achieving pollutant reduction and efficient water resource utilization; Noise-generating equipment is equipped with measures such as vibration-damping bases, silencers, and sound barriers to ensure compliance with boundary noise emission standards, further

optimizing the acoustic environment in surrounding areas. By optimizing exhaust gas treatment facilities and enhancing maintenance, emissions of pollutants such as SO2, NOx, and dust have been reduced; Hazardous waste is collected by category and stored in designated areas with clear identification labels. A registration log for inbound and outbound waste is established, and qualified agencies are regularly entrusted to transfer and dispose of the waste. Transfer forms are processed, and the resource utilization and reduction management of hazardous waste are promoted in an orderly manner.

In 2024, the Company achieved all major pollutant reduction targets, with subsidiaries Jinchi Energy and Changyuan Lico New Energy completing their environmental information disclosures in full compliance with regulatory requirements for mandatory environmental reporting.

Wastewater Pollutant Discharges

In terms of wastewater pollutant treatment, for the treatment of high-salinity, high-NH<sub>3</sub>-N precursor wastewater, such processes as plate-and-frame filtration, steam stripping for ammonia removal, pH adjustment, MVR evaporation crystallization, and reverse osmosis are adopted to recover condensate water to produce pure water, and concentrated water is used as supplementary water for cooling circulating water, achieving zero discharge of heavy metal production wastewater. The separated sodium sulfate from evaporation crystallization is sold as a byproduct. For lithium iron phosphate wastewater, the treatment process involving flocculation sedimentation + multi-media filtration + carbon filtration + membrane system is adopted. The treated clean water is reused as makeup water for the cooling circulation system, while the concentrated water is further treated by an MVR system for reuse.

The Company strictly implements the principles of "separate drainage of rainwater and sewage, as well as clean and polluted wastewater" to ensure classified treatment and orderly discharge of all water streams. Rainwater is collected through dedicated pipelines and discharged into the industrial park's rainwater system via designated outlets; Domestic sewage from office and living areas undergoes pretreatment in oil separation tanks and septic tanks before being discharged into the municipal sewagenetwork through dedicated outlets; Industrial wastewater is collected in each workshop's



collection tank, then pumped to the wastewater treatment plant for processing and reuse, achieving zero liquid discharge of production wastewater.

In 2024, the wastewater treatment facilities operated efficiently, with the Company treating a total of 630,000 metric tons of production wastewater.



Exhaust Gas Pollutants

Types of Pollutants	Treatment Methods
Ammonia	Spray absorption treatment with dilute sulfuric acid
Sulfuric acid mist	Spray absorption treatment with alkali solution
Dust	Treatment with sintering plate dust removal, bag dust removal, cyclone dust removal, water curtain dust removal and other treatment technologies
Organic exhaust gas	Treatment with RTO Incinerator

In line with production facilities and their emission characteristics, the Company has installed complementary exhaust gas pollution prevention and control equipment, and conducted regular environmental protection risk inspections and implemented immediate corrective actions for identified issues to ensure timely and proper resolution. Daily maintenance and management of the facilities have been strengthened to guarantee the stable operation of pollution prevention and control systems. Additionally, the Company routinely commissions qualified third-party testing agencies to perform exhaust gas testing, ensuring compliance with air pollutant discharge standards.

In 2024, the Company's exhaust gases included 2.08 metric tons of particulate matter, 1.28 metric tons of sulfur dioxide, 4.62 metric tons of nitrogen oxides, 0.48 metric tons of ammonia gas and 0.37 metric tons of sulfuric acid mist.



Waste Disposal

The Company strictly complies with the relevant provisions of the Law of the Law of the People's Republic of China on Solid Waste Pollution Prevention and Control and has established internal regulations such as the Measures for the Administration of Solid Waste and the Measures for the Administration of Scrap Material, rigorously implements the requirements for reducing, recycling, and safely disposing of solid waste, takes measures to reduce the amount of solid waste generated from raw materials, processes, and management, promotes the comprehensive utilization of solid waste, reduces the harm of solid waste, and ensures 100% safe disposal of hazardous waste. Additionally, the Company continuously improves its solid waste classification, storage, and transportation systems to ensure standardized waste handling.

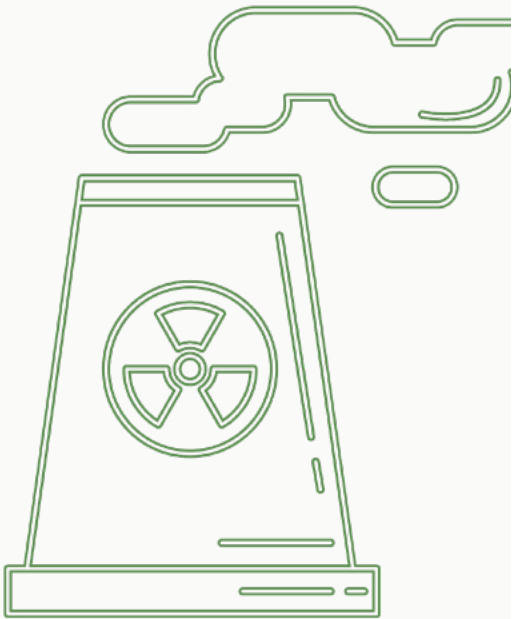
For general solid waste, all subsidiaries construct general solid waste warehouses in compliance with the Standard for Pollution on The Storage and Disposal Site for General Industrial Solid Wastes. After generation, general solid waste is temporarily stored in categorized sections within these warehouses to ensure standardized and orderly storage.

All subsidiaries have constructed temporary hazardous waste storage facilities in compliance with the Standards for Pollution Control on Hazardous Waste Storage. Hazardous waste is collected by category and stored in designated zones within dedicated hazardous waste warehouses, with clear hazard warning labels posted. An inventory log for inbound and outbound records is maintained, licensed hazardous waste treatment operators are regularly engaged for disposal, and transfer receipts are processed.

Domestic waste and kitchen waste are collected at designated locations and promptly removed by sanitation services.

Noise

The Company strictly complies with the relevant provisions of the Law of the People's Republic of China on the Prevention and Control of Noise Pollution and has established an internal Measures for the Administration of Noise, has implemented a noise monitoring mechanism and adopted comprehensive noise reduction measures to strictly control noise generation and transmission at both the source and propagation stages. Meanwhile, it actively promotes noise reduction upgrades to continuously improve noise prevention and control effectiveness, striving to create a quiet and harmonious surrounding environment.



Case Noise Management

To enhance intrinsic environmental protection standards, the subsidiary Changyuan Lico New Energy conducted a comprehensive inspection of all noise sources within the plant area, with continuous monitoring of noise-generating equipment, designated zones, and factory boundary noise levels.



An investment of RMB 4.83 million was allocated to install silencers and noise barriers for noise-emitting equipment and affected areas. After renovation, the noise emissions at each factory boundary met the standard, and the sound environment quality in the surrounding areas was further optimized.

Ecosystem and Biodiversity Protection

The Company strictly conducts environmental impact assessments for new, renovated, and expanded projects in full compliance with the Environmental Impact Assessment Law of the People's Republic of China and the Regulation on the Administration of Construction Project Environmental Protection. All projects meet the requirements for ecological conservation redlines, environmental quality standards, and resource utilization limits, and none are included in the Negative List for Market Access.

The Company strictly complies with biodiversity protection requirements. All construction projects are located outside ecological conservation redlines and environmentally sensitive areas, and exclusively on industrial land. The production activities and products involved have minimal impact on regional flora and fauna biodiversity. All construction projects of the Company have achieved 100% greening coverage. Notably, the newly built projects of Changyuan Lico New Energy have added over 900,000 camellias, azaleas, and osmanthus trees in the past two years, along with more than 60,000 m<sup>2</sup> of turf grass. The ornamental ponds have been stocked with over 300 carp and crucian carp.

Vegetation Protection





# Combating Climate Change

## Climate Change Governance System

The Company has established a governance framework structured as "Board of Directors - Strategy Committee of Board of Directors - ESG Leading Group - ESG Working Group". It is also equipped with professionals possessing climate change-related expertise, who are proficient in applying climate verification tools, research methodologies, and relevant regulations to provide clear direction and specialized guidance for the Company's climate change response.

Personnel	Responsibilities
Board of Directors	<div>➤ Responsible for identifying and assessing climate change-related risks of the Company, formulating guidelines, policies, systems, and targets for climate change response, reviewing and making decisions on material issues related to climate change, and overseeing and evaluating the Company's climate-related practices.</div>
BOD's Strategy Committee	<div>➤ Responsible for overseeing the implementation of the Board of Directors' resolutions and policies regarding climate change response, reviewing the Company's climate-related risks, and regularly reporting progress to the Board of Directors.</div>
ESG Leading Group	<div>➤ Responsible for leading the execution of the Company's climate change strategy and management plans, identifying climate-related risks to the business, assessing their potential impact, and developing mitigation measures;</div> <div>➤ Evaluate the climate change performance of various departments and coordinate improvement initiatives.</div>

Personnel	Responsibilities
ESG Working Group  (comprising the Strategic Planning Department, Safety and Environmental Protection Department, Technology Promotion Department, and subsidiaries)	<div>➤ Responsible for planning and promoting work related to combating climate change based on the requirements of stakeholders and the Company's sustainable development requirements.</div>

The Company has developed the "2023-2035 Sustainable Development Plan" based on stakeholder input and practical considerations, thoroughly addressing sustainability-related risks and opportunities such as climate change. The plan covers carbon emissions management, product carbon footprint management, energy management, and other key areas. Meanwhile, the Company has incorporated energy conservation and carbon reduction as binding indicators into the annual performance evaluations of all subsidiaries, linking them directly to annual incentive bonuses. Each year, the Company organizes selections to recognize outstanding departments and individuals in energy conservation and environmental protection, awarding those who have made remarkable achievements in implementing energy-saving, emission reduction, and carbon reduction initiatives.

## Climate Change Strategy

The Company has incorporated green and low-carbon development into its overall development strategy and the "15th Five-Year Plan", committed to becoming a "resource-efficient and environmentally friendly" enterprise. It actively and steadily advances the goals of carbon peak and carbon neutrality, integrating climate change risk management processes into its overall risk management framework, actively assess identified climate change risks, and develop effective management measures to ensure that identified climate change risks are within a controllable range. In addition, the Company has fully implemented energy conservation and carbon reduction initiatives to enhance efficiency, tapping into the potential for pollution and carbon reduction. It has carried out in-depth activities such as process optimization, equipment upgrades, and management improvements, to increase the proportion of renewable energy supply, and advance the energy efficiency improvement of key energy-consuming equipment.

Risk	Description	Duration of Impact	Management Measures
Extreme weather and changes in precipitation patterns	may have an impact on supply chains and production facilities, causing asset losses and even potentially leading to employee safety accidents.	Short-term	Promote sustainable development. Energy conservation and emission reduction measures are taken to improve resource utilization efficiency and reduce carbon emissions, and natural disaster emergency response mechanisms are continuously improved.
Policies and laws risks	The adjustment of climate policies may affect corporate production and operations; Local governments will implement stricter environmental protection regulations, imposing rigorous limits and emission quotas on wastewater, exhaust gases and solid waste and greenhouse gases. Compliance with such new rules and standards will increase the Company's regulatory costs.	Medium- and long-term	Strengthen climate risk assessment. Closely monitor regulatory and policy changes related to "Dual Carbon" goals (peaking carbon emissions and achieving carbon neutrality), assess climate change vulnerabilities, and develop corresponding risk management strategies.
Raw material supply	The key raw materials for lithium-ion batteries may face supply shortages or price volatility due to climate change-related resource constraints.	Medium-term	Supply chain diversification. Ensure the stability of raw material supply by identifying alternative materials or partners; Collaborate with upstream and downstream partners to jointly implement carbon reduction initiatives, establish coordination mechanisms to enhance the value chain's resilience to climate change.
Energy consumption	The energy demand in manufacturing processes may increase due to climate change, leading to higher production costs.	Medium- and long-term	Energy efficiency improvement. Conduct regular inspections of production facilities to identify potential hazards, and promptly upgrade equipment as needed; Optimize production processes to reduce energy consumption and improve energy efficiency.

Environmental Section:  
Harmony with Nature,  
Empowerment through Ecology

Community Section:  
Spreading Genuine Compassion,  
Protecting Deeds of Kindness

Governance Section:  
Multi-stakeholder Co-governance for  
Collaborative Development

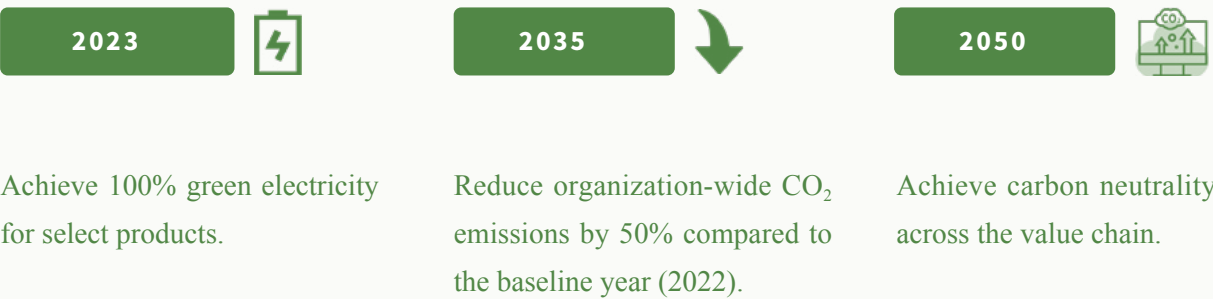
Risk	Description	Duration of Impact	Management Measures
Growing demand for clean energy	With the growing demand for clean energy, lithium battery companies may expand their market in areas such as batteries.	Medium- and long-term	Investment in R&D. Enhance R&D of high-performance, low-cost lithium battery technologies to meet market demand.
Energy use	Increase the use of clean energy and further reduce energy procurement costs.	Medium- and long-term	Develop photovoltaic power generation projects and procure green electricity.
Technology-driven innovation	Climate-related technological innovation may bring new development opportunities for the Company.	Medium- and long-term	R&D and innovation. The Company will invest in R&D to develop more environmentally friendly and efficient products and technologies.
Brand image enhancement	Taking active measures to combat climate change helps strengthen corporate social reputation.	Medium- and long-term	Active disclose. Regularly publishing ESG reports of the Company and disclosing information on the status of the Company's energy saving and emission reduction objectives, enhancing the Company's green image.
Development of electric mobility	The widespread adoption of electric vehicles will drive demand for high-performance lithium batteries.	Medium- and long-term	Expand production scale. Improve production efficiency and ensure that the supply of lithium batteries keeps pace with the growth of the electric vehicle market.

Definition of short, medium, and Medium- and long-term

- Short term: Refers to the period within 1 year (inclusive) after the end of the Company's sustainability reporting period.
- Medium term: Refers to the period from 1 year to 5 years (inclusive) after the end of the Company's sustainability reporting period.
- Medium- and long-term: Refers to the period beyond 5 years after the end of the Company's sustainability reporting period.



Climate Targets



Climate Adaptation

The Company's long-term climate adaptation is impacted by energy supply and low-carbon transition, while downstream demand shifts and raw material supply fluctuations disrupt its business model, concurrently exerting climate-related effects. In terms of energy management, the Company is increasing the use of renewable energy by constructing distributed photovoltaic facilities. In terms of supply chain optimization, the Company is working with suppliers to develop contingency plans and diversify supply channels. In terms of product R&D, the Company focuses on developing environmentally friendly and efficient materials. In terms of policy trends, evolving regulations on renewable energy and carbon emissions, particularly the EU's new battery regulations, will impact costs and demand, and the Company is closely monitoring these developments. In terms of procurement, the Company is adjusting its strategy by prioritizing recycled materials and optimizing production processes to improve capacity utilization. Additionally, the Company monitors carbon emission scenarios based on green electricity usage and recycling rates, and formulates corresponding strategies.

Scenario Analysis

The Company employs scenario analysis to assess carbon footprints under different scenarios. The analysis is conducted using SimaPro, with a self-designed scenario framework that includes one baseline scenario and multiple pressure scenarios of varying degrees. Among them, the baseline scenario serves as a reference under business-as-usual conditions without additional influencing factors, while the pressure scenarios thoroughly incorporate policy requirements. The Company will continue to improve the data collection and management system for climate-related risks to enhance data accessibility and accuracy. The Company will further refine stress testing models and validate them across multiple dimensions to improve their applicability and precision, thereby enabling more accurate assessment of climate change impacts on the business operations.

Given that the clean energy mix directly impacts carbon emissions from electricity use, the Company calculated climate change scenarios for 20%, 50%, and 100% green electricity adoption respectively. In terms of recycled material usage, the Company has established and continuously optimized scenario analysis to compare the climate change impacts at different recycling ratios. When the recycled material ratio reaches 50%, the carbon footprint of cathode materials and batteries is reduced by 20.56% and 10.37% respectively.



# GHG Emissions Management

The Company is firmly anchored in the strategic direction of green and high-quality development, adhering to a systematic approach to balance development and carbon reduction, actively and steadily advances carbon peak and carbon neutrality initiatives. With the of target of achieving carbon peak before 2030, the Company will solidly and deeply promote the carbon peak action, shift from energy consumption "dual control" to carbon emissions "dual control", continue to deepen the green and low-carbon transformation of energy and the green and low-carbon recycling transformation, and formulate the "2024 Carbon Peaking Action Plan" to accelerate the achievement of the Company's carbon neutrality goal.

The Company has established a "Dual Carbon" Leading Group with the Party Secretary and Chairman serving as the leader. The Leading Group has formulated the 2024 Work Plan for Carbon Peak Action, clearly defining the responsibilities of all departments. Focusing on three key areas -process optimization, equipment upgrades, and management enhancement, the Company is implementing a comprehensive energy conservation and carbon reduction efficiency initiative. During the reporting period, the Company organized two energy conservation and carbon reduction meetings to explore the potential of energy conservation and carbon reduction. Throughout the year, multiple measures were implemented, including rooftop distributed photovoltaic power generation, waste heat recovery from kiln flue gas, energy conservation upgrades for circulating water pump motors, and optimization of gas venting at oxygen stations, resulted in a reduction of CO<sub>2</sub>emissions equivalent to 11,648 metric tons of standard coal, effectively controlling and lowering energy consumption while progressively decreasing total carbon emissions and intensity. The Company continued to optimize and improve its energy conservation and carbon reduction management system, steadily enhancing the level of control in this area. It clarified the responsibilities and work requirements for monitoring, measurement, statistics, and reporting of energy conservation and carbon reduction across all departments, and established a monthly reporting system for production energy consumption and carbon emissions.

The Company fully utilized the online energy monitoring system and MES energy management system to track electricity and power consumption in real time. By analyzing and evaluating energy usage across various sectors, it provided decision-making support for production scheduling and off-peak power consumption, thereby enhancing the informatization and precision of energy management and achieving cost reduction and efficiency improvement. Various subsidiaries incorporated energy consumption per unit product into performance evaluations, conducting regular monthly monitoring and assessments to strengthen production departments' accountability for energy conservation and carbon reduction.

## Case    Subsidiary Jinchi Energy's Emission Reduction Effectiveness

Subsidiary Jinchi Energy has consistently implemented waste heat recovery from the condensate water of the deammoniation tower reboiler. By utilizing this residual heat to preheat wastewater, the steam consumption is reduced by 5,000 metric tons annually, equivalent to reducing CO<sub>2</sub>emissions by 1,522 metric tons.





**Case**      **Subsidiary Changyuan Lico New Energy's Emission Reduction Effectiveness**

The subsidiary Changyuan Lico New Energy has implemented energy-saving and carbon reduction measures such as 6 sets of three-layer kilns, recovery of waste heat from kiln flue gas, energy conservation renovation of circulating water pump motors, optimization of gas venting in oxygen production stations, and renovation of RTO incinerators for lithium iron phosphate tail gas treatment facilities, resulting in a total reduction of 8,549 metric tons of carbon dioxide emissions.



**Meanwhile, the Company conducts annual carbon emissions accounting in accordance with the Guidelines for Accounting and Reporting of Greenhouse Gas Emissions for Other Industrial Enterprises. Greenhouse gas inventories are compiled based on the ISO 14064-1:2006 standard, with active efforts to assess the carbon footprints of key products. Carbon footprint certifications have been completed for products including LY318S, LY336, LY346, L5503, and L6509. The Subsidiaries Jinchi Energy and Changyuan Lico New Energy's Lugu Base were awarded the title of "National Green Factory" in 2022 and 2020, respectively.**



# 02

## Community Section Spreading Genuine Compassion, Protecting Deeds of Kindness

Employee Care: Minmetals New Energy is committed to fostering a fair recruitment environment, safeguarding employee rights through diversified initiatives, nurturing talent development, and providing compassionate workplace support. Customer Rights Protection: The Company has established a robust quality management system and implements stringent data security and privacy protection measures. R&D: With a well-structured system, the Company drives innovation while strengthening intellectual property protection. Supply Chain Management: Through rigorous governance, risk mitigation, and diversified strategic partnerships, the Company has built a highly efficient and stable supply chain. In addition, the Company is actively engaged in philanthropic initiatives, contributes to rural revitalization, demonstrating its commitment to societal well-being.





# Building a Happy Workplace

## Practicing Fair Employment

The Company strictly complies with laws and regulations such as the Labor Law of the People's Republic of China and the Labor Contract Law of the People's Republic of China, and has established a series of internal policies including the Company Recruitment Management Regulations. The Company's recruitment process is transparent and well-defined, consistently adhering to the principles of openness, fairness, and impartiality. The Company upholds equality and respect, prohibiting discrimination against any candidate based on age, gender, race, or other factors. In the recruitment process, the Company emphasizes diversity and inclusion, encouraging talents from various backgrounds and disciplines to join the Minmetals New Energy team through channels such as social recruitment, campus recruitment, and internal open competitions.

Total number of in-service employees/person

 **2,064**



Ethnic minority employees

**111**

Proportion of ethnic minority employees

**5.38%**



Employees with disabilities

**5**

Proportion of employees with disabilities

**0.24%**



Demobilized military personnel employed

**32**

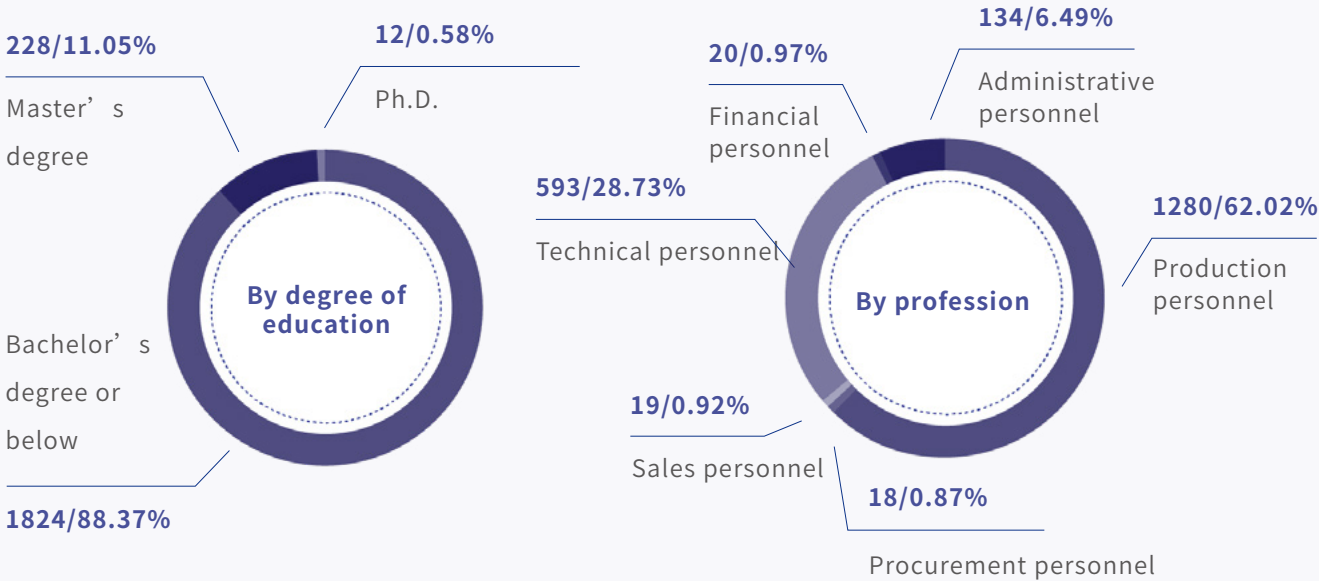
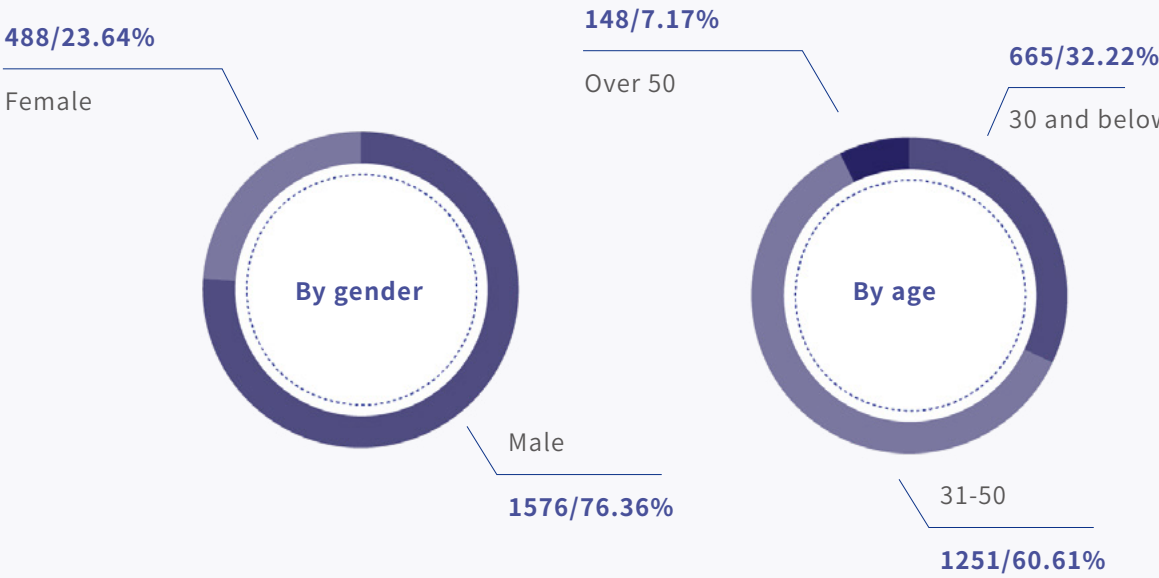
Proportion of demobilized military personnel employed

**1.55%**

Environmental Section:  
Harmony with Nature,  
Empowerment through Ecology

Community Section:  
Spreading Genuine Compassion,  
Protecting Deeds of Kindness

Governance Section:  
Multi-stakeholder Co-governance for  
Collaborative Development



# Safeguarding Employees’ Rights and Interests

## Remuneration and Benefits

The Company has established standardized documents, including the Measures for the Administration of Company Compensation and the Measures for the Administration of Employee Performance Assessment, to provide industry-competitive salaries and ensure timely and full payment. The Company respects the value differences among various positions and implements a differentiated compensation system tailored to different job categories, establishing a scientific, reasonable, and effective salary distribution model with a dynamic adjustment mechanism. In response to employee needs, the Company ensures that attendance records, performance evaluations, and disciplinary actions are all confirmed by employee signatures. Employees reserve the right to appeal in case of any objections.

The Company continuously enhances its scientific research, development, and technological innovation capabilities, stimulates the professional enthusiasm, initiative, and creativity of technical personnel, and provides rewards for various scientific and technological innovation achievements as well as academic outputs. It also offers core talent mid-to-long-term incentive plans and education and training sponsorship programs.

The Company is committed to building a comprehensive and multi-tiered employee benefits system. In strict compliance with national policies and regulations, the Company provides social insurance, housing provision fund, and supplementary commercial medical insurance, effectively safeguarding employees' livelihood stability and enhancing their sense of professional security and belonging.

## Health and Safety

The Company places high priority on employee health and workplace safety, actively promoting health awareness, conducting occupational health training, and fostering a healthy work environment, to enhance employees' occupational health literacy. The Company headquarters has established the General Emergency Response Plan for Public Emergencies, the Measures for the Administration of Public Emergencies Response, and the Measures for the Administration of Emergency Capacity Building for Workplace Safety, forming a "1+1" emergency regulatory framework for public emergencies. The two subsidies have respectively established their Emergency Response Plans for Workplace Safety Accidents, including comprehensive emergency plans, specialized emergency plans, and on-site disposal measures. The Company has acquired certification of ISO 45001:2018 Occupational Health and Safety Management Systems.

The Company has solidly advanced the three-year campaign for fundamental improvements in workplace safety, continuously pursued the dynamic clearance of major accident hazards, and carried out special rectifications in key areas such as fire safety and subcontractor construction, to actively promote technological support for safety and environmental protection. The Company has continuously improved the safety management system, made efforts to strengthen the dual-prevention mechanism, established an assessment and evaluation system for safety management, and improved channels for reporting workplace safety concerns, thereby enhancing the effectiveness of safety and environmental protection management. The Company has organized thematic activities such as "Workplace Safety Month" and "Fire Safety Month", and conducted emergency drills including hazardous chemical leakage and fire evacuation emergency response drills targeting key risks under the Company's control, effectively raising employees' safety and environmental protection awareness. The Company has strengthened occupational health management by organizing pre-employment, on-the-job, and post-employment occupational health examinations, established occupational health management files, and carried out "Family Doctor" activities in enterprises, to deepen the establishment of "Healthy Enterprise".



In 2024, the Company organized a total of 183 safety training sessions, including specialized training for confined space operations, occupational health programs, post-holiday resumption safety education, guardian training for special operations, and case studies on production workplace safety accidents, with a total duration of 366 training hours. The subsidiary Changyuan Lico New Energy partnered with the Hunan Red Cross Society and Lei Feng Community Hospital to conduct "Emergency Rescue Knowledge and Skills Training", further enhancing employees' safety awareness and strengthening the foundation of safety mindset.

The Company has set the occupational health and safety production management goals of zero general and above workplace safety accidents, zero new cases of occupational diseases, and no serious violations of the Hunan Provincial Social Security Comprehensive Management Regulations. In 2024, the Company recorded zero general-or-above-level workplace safety accidents (as defined by national standards) and no new occupational disease cases. Its subsidiary Changyuan Lico New Energy was awarded the title of "Hunan Provincial Healthy Enterprise", a government-endorsed honor for exemplary workplace health management.

Case

Fire emergency evacuation drill for the testing building and the launch ceremony of the "Workplace Safety Month" held by the Company

Minmetals New Energy held the launch ceremony for "Workplace Safety Month" under the theme 'Safety for Everyone, Emergency Preparedness for All - Keeping Escape Routes Clear'. The Company organized a fire evacuation drill and a hands-on fire extinguisher training session in the testing building to comprehensively evaluate employees' emergency escape and self-rescue capabilities in case of sudden fires, and strengthen the practical response and coordination skills of the Company's fire rescue team, thereby enhancing the overall emergency preparedness of the organization.



### Safety Training



### First Aid Training



### Democratic Management

The Company continues to strengthen democratic management through measures such as holding congress of workers and staff, listening to annual work reports, completing elections for congress of workers and staff, and soliciting opinions and suggestions on annual activity plans. Meanwhile, the Company's trade union, leveraging subsidiary initiatives, has focused on lean operation improvements. By implementing practices like whole-staff participation and closed-loop process management, it has carried out comprehensive lean innovation activities to foster a deeper sense of ownership among employees. By strengthening democratic management, the Company has not only enhanced employees' sense of identity and belonging, but also laid a solid mass foundation for its stable operations.

### Minmetals New Energy Holds a Congress of Workers and Staff



### Talent Cultivation

The Company adheres to the philosophy of "prospering through talent", genuinely focusing on employee development. It has implemented the Measures for the Administration of Employee Training and Education along with supporting measures. In accordance with the nature and characteristics of different positions, the Company provides multiple career development pathways, including the management ladder, professionals ladder, specialized business ladder and operation ladder. A diversified career development system has been established, allowing for vertical promotion, horizontal job rotation, and mobility toward key positions. A scientific talent evaluation and selection mechanism has been established to actively promote talent pipeline development. A reserve management trainee program is implemented, creating extensive growth platforms for employees.

The Company has implemented specialized talent development programs such as the "Elite 300" Talent Program, LICO Rising Star Program, and Skilled Talent Cultivation Initiative. Through measures like job rotation, mentorship programs, and skills competitions, the Company fully unlocks employees' potential, empowers their career growth, and injects vitality into long-term corporate development, building a high-quality talent pool to support the Company's high-quality growth.

Case

Minmetals New Energy's 2024 "LICO Rising Star" Training Camp Successfully Concluded

The 2024 "LICO Rising Star" Training Camp of Minmetals New Energy officially commenced. Zhang Zhen, General Manager and Deputy Party Secretary of the Company, attended the opening ceremony and delivered a lecture to the new employees. The new employees underwent an intensive one-week systematic training program covering various aspects such as the Company's development strategy, corporate culture, industry trends, and team building.



### Humanistic Care

The Company places high importance on employee care and provides support through various initiatives such as visiting employees in financial difficulties, organizing mental health seminars, and conducting women's health knowledge workshops. In 2024, the Company organized sports events such as tug-of-war and badminton, as well as celebrations for the Spring Festival and Lantern Festival, as well as a series of activities for "International Women's Day" and a "Family Open Day" event for employees' children during the summer vacation. These initiatives significantly boosted staff morale and enhanced employee satisfaction and well-being.



"Feather" and "LICO" Soar Together Chasing Dreams



Series of Activities for International Women's Day



"Start from the Heart, Empower the Journey"  
Mental Health Lecture



Spring Festival Celebration Performance



Summer Research & Learning Program  
for Employees' Children + Family Open Day



Lantern Festival Event



# Protection of Customers’ Rights and Interests

## Product and Service Quality and Assurance

Governance

The Company continuously improves its product quality management system by establishing a quality and safety accountability framework that covers top management, management representatives, quality personnel, and employees. The top management assumes primary responsibilities including formulating quality strategies and implementing the quality and safety accountability system. The management representative is responsible for establishing the quality policy and objectives, planning the quality management system, exercising the one-vote veto power on quality issues, and implementing quality assessment and incentives. Quality management personnel are tasked with strengthening process quality control, organizing quality analysis, correction, and improvement, as well as enforcing the quality and safety responsibility system. Production and inspection personnel bear direct responsibility for ensuring product manufacturing quality.

The Company has established multiple relevant institutional documents for products and services based on the ISO 9001:2015 and IATF16949:2016 quality management system standards to ensure delivery quality and service excellence.

Product and Service Management Systems	Product Recall System	After-sales Service System	Customer Complaint Handling System
Production Control Procedures	Customer Feedback Control Procedures	Measures for the Administration of Sales	Customer Feedback Control Procedures
Supplier Management Control Procedures		Customer Manager Mechanism Implementation Rules	
Nonconforming Product Control Procedures		Customer Feedback Control Procedures	

### Strategy

The Company upholds the quality management policy of “crafting products and services that exceed customer expectations with a spirit of craftsmanship”. It consistently adheres to the service philosophy of observing the market with dedication and treating customers with sincerity. We are dedicated to meeting customer needs and producing products and services that go beyond the customer expectations with professional attitude, standardized management, precision control, unceasing innovation of the management mode and the drive for continuous improvement to realize mutual growth with customers.

### Risk, Influence and Opportunity Management

In quality inspection and control systems, the Company establishes dedicated departments and builds professional teams to cover the entire business process through "systems + technologies + standards". For quality informatization development, the Company implements a laboratory information management system to address critical challenges, enhancing supervision efficiency and work informatization levels. Under the dimensions of quality culture and customer service, the Company conducts "Quality Month" activities, establishes risk contingency mechanisms, complies with relevant regulations, and forms dedicated service teams to enhance customer service quality. The Company is making multi-dimensional efforts to comprehensively enhance product quality management, laying a solid foundation for high-quality development.

The Company places high importance on product after-sales service, has established the Customer Feedback Control Procedures and Measures for the Administration of Sales, and set up a product recall leading group. Should any product be found non-compliant with standards or posing safety risks, the Group will immediately halt sales and initiate proactive recalls, and develop corresponding solutions at the same time. The Company has established a 24-hour service hotline to promptly respond to complaint calls, efficiently allocate resources, and categorize responses based on the urgency level of complaints. Designated personnel are required to provide solutions within specified time. Major and above-level complaints will be included in the service quality assessment.



Complaint information is synchronized to the manufacturing base for analysis and corrective actions. By assigning tasks to localized service teams through the system, fully authorizing channel partners, and processing claims online, the resolution efficiency is improved.

Indicators and Targets

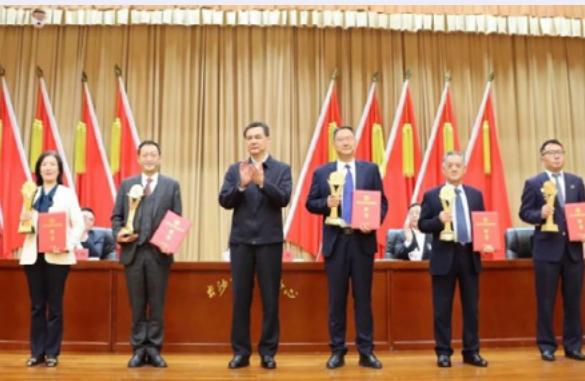
In 2024, the Company experienced no major quality incidents, work-related fatalities, or equipment accidents. Meanwhile, the Company regularly conducts proactive product testing (both internal and external) and has obtained multiple certifications by quality management systems standards, ensuring operational efficiency in corporate management.



Certification of IATF 16949:2016 Quality Management System

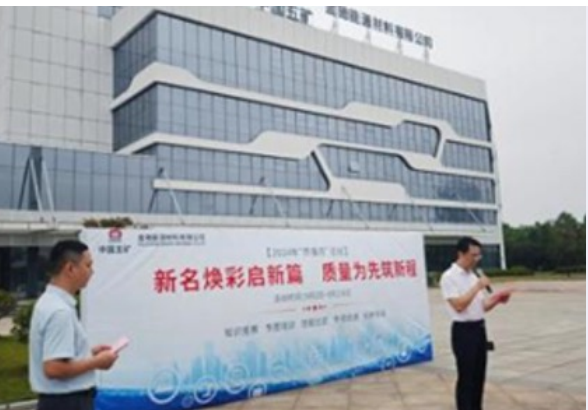
As of the reporting period end, the Company has obtained certifications under IATF 16949:2016 Quality Management System and ISO 9001:2015 Quality Management Systems, with two laboratories and testing centers accredited by China National Accreditation Service for Conformity Assessment (CNAS).

Company Wins the 3rd Changsha Mayor's Quality Award



Case Quality Control Compliance Promotion

In September 2024, Minmetals New Energy launched diverse and substantial "Quality Month" activities under the theme "New Name, New Chapter; Quality First, Building a New Journey". Zhang Zhen, the Company's General Manager, and Deputy Party Secretary, attended the event and delivered a speech, urging all employees to fully understand the profound implications of high-quality development in the new phase, accelerate the thorough implementation of comprehensive quality management, and continuously enhance the core capability of creating value through quality. During the "Quality Month" campaign, the Quality Assurance Department of the Company and the Quality Departments of subsidiaries conducted targeted thematic training sessions covering project development, supplier management, process control, and customer requirement dissemination, achieving "full coverage" of quality awareness promotion.



# Data Security and Privacy Protection

Governance

The Company strictly complies with relevant laws and regulations, including the Data Security Law of the People's Republic of China, the Personal Information Protection Law of the People's Republic of China, and the Cybersecurity Law of the People's Republic of China, and carries out its operations accordingly in accordance with its internal policies such as the Measures for the Administration of Network and Information Security and the Measures for the Administration of Information System Data. The Company has established a Cybersecurity and Informatization Committee chaired by the Chairman of the Board, which is responsible for implementing regulatory requirements, reviewing development plans and institutional standards, coordinating major incidents, and overseeing overall work advancement. For data security management, the Company has built a cybersecurity management system, classified security incident levels, and clarified division of responsibilities.

Strategy

Based on the characteristics of large production scale and high quality requirements in the industry, as well as the needs of its own high-quality development strategy, the Company vigorously transforms and upgrades towards digitization, networking, and intelligence, creates a new capability system, promotes the formation of new models and formats on the basis of enhancing traditional value benefits, and obtains sustainable competitive and cooperative advantages.

In 2024, the Company formulated the following strategic objectives:

				
Continuously improve the information security management system and successfully pass the ISO 27001: 2022 certification audit	Promulgate the Measures for the Administration of Information System Data to strengthen the protection of data classification	Regularly promote the operation of anti-leakage system and reduce the risk of data leakage	Optimize the data backup strategy to reduce the risk of data loss	Promote the information system protection

Risk, Influence and Opportunity Management

The Company has rigorously implemented the Group's key initiatives to "empower operations with information technology and build a Digital Minmetals", actively advancing digital transformation efforts focused on intelligent factory construction and smart enterprise operations. Core digital systems such as smart office platforms, ERP, intelligent warehousing and logistics, intelligent laboratories, and production operation platforms have been established, achieving seamless integration across business functions, continuously enhancing data-driven capabilities and digital governance.

Regarding data security, the Company conducts annual offensive and defensive drills (red team/ blue team exercises) and emergency response operations, with all employees signing responsibility commitment letters and undergoing yearly performance evaluations. For customer privacy protection, the Company implements a company-wide anti-leakage system to encrypt local data and require approvals for external transfers, while all business entities incorporate privacy-by-design principles throughout product development lifecycles. These measures effectively safeguard data security and customer privacy, reducing various risks associated with cybersecurity issues.



Indicators and Targets

In 2024, the Company achieved digital coverage exceeding 75% across key business processes, marking significant progress in digital transformation. Regarding customer privacy protection, the Company has not received any complaints related to customer privacy infringement or loss of customer data, and no major data security or privacy breach incidents have occurred.

Case Compliance Awareness Campaign for Information Protection

In April 2024, Minmetals New Energy took the "April 15 National Security Education Day" as an opportunity to launch a confidentiality awareness month campaign, advocating for everyone to enhance their awareness of confidentiality, maintain national security, guide cadres and employees to consciously fulfill national security and confidentiality obligations, and improve their ability to counter espionage and properly carry out confidentiality work.



Refining and Advancing R&D and Innovation

R&D Management System

Governance

To further enhance R&D efficiency and stimulate employees' innovation enthusiasm, Minmetals New Energy has formulated internal measures for the administration of including the Detailed Rules for Intellectual Property Management and Detailed Rules for Scientific and Technological Achievements Management, in accordance with the Patent Law of the People's Republic of China and the Patent Cooperation Treaty, to standardize innovation and R&D management.

Strategy

The Company has established an in-depth R&D technology system for lithium battery cathode materials, following a development strategy of "mass-producing one generation, reserving one generation, and pre-researching one generation". It continues to strengthen its technological layout in the field of lithium battery materials, conducting targeted technology reserves and product development. Meanwhile, it closely monitors R&D trends in new battery material systems, seizing opportunities to maintain and consolidate its industry-leading position in the development of new energy materials.

Risk, Influence and Opportunity Management

The Company has established and improved a comprehensive, multi-level, and systematic sustainable R&D system and innovation mechanism, with a strong emphasis on incentive mechanisms for researchers. The Company encourages technological innovation and provides special incentives for new product development, process technology innovation, patents, and academic publications.

Indicators and Targets

R&D Bases

The Company currently has three bases in Lugu, Tongguan, and High-tech, focusing on the research and production of efficient battery materials, including ternary cathode materials and lithium iron phosphate cathode materials for the automotive power battery market, lithium cobalt oxide cathode materials for the 3C electronic consumer product market, and nickel hydrogen materials for the hybrid vehicle market. The Company has established China's first pilot-scale service base for cathode materials for power batteries, which was recognized as the "Hunan Provincial New Materials Pilot Platform". It possesses a complete set of basic testing facilities covering the entire process from lab R&D to pilot-scale verification. It has obtained multiple qualifications, including the National Enterprise Technology Center and a Postdoctoral Research Workstation, and has also received CNAS Laboratory Accreditation Certificate.

Innovation Platforms

The Company has achieved remarkable results in R&D and innovation, with continuous improvement in technological innovation capabilities. All four national and provincial-level sci-tech projects undertaken by the Company successfully passed acceptance checks, among which key projects like the Key Technologies and Management System for Intelligent Disassembly Production Lines of Retired Products have been successfully demonstrated in practical applications.

The independently developed "Key Technology and Industrialization of New-Generation High-Voltage Low-Cobalt Single-Crystal Ternary Materials" and "Development and Industrialization of High-Power Ternary Cathode Materials" have reached internationally advanced levels.

Technical Standards

The standardization efforts have yielded fruitful results, with the Company participating in the drafting of a total of 80 implemented technical standards, including 11 national standards and 35 industry standards. The industry standard Green Factory Evaluation Requirements for Lithium-ion Battery Cathode Material Precursors edited by the Company, has been included in China's national-level Green Factory Evaluation Standards List. Additionally, the industry standard Solid-State Lithium-ion Battery Cathode Materials, spearheaded by the Company, has been officially approved under the Ministry of Industry and Information Technology's "2024 Fourth Batch of Industry Standard Development and Revision Plan", accelerating R&D and application of solid-state battery technologies. In terms of standard construction, the Company continues to make significant R&D investments, constantly strengthening its standard system framework to empower the standardized development of the industry.

Recognitions and Awards

Additionally, the subsidiary Changyuan Lico New Energy was recognized as the "Changsha Capacity Expansion and Upgrading Enterprise R&D Center". This year, the Company was awarded two "Excellent Technical Standards" prizes by the National Technical Committee for Standardization of Nonferrous Metals. Among them, the national standard Lithium-rich Lithium Iron Oxide won the Third Prize in Technical Standards from the National Technical Committee for Standardization of Nonferrous Metals, and the industry standard Lithium Nickel Cobalt Manganese Oxide received the Second Prize in Technical Standards from the same committee. The invention patent titled A Grid-like Porous Precursor Material and Its Preparation Method, and A Cathode Material (202010253246.5) of the subsidiary Jinchi Energy was approved for the Second Prize of the Hunan Patent Award.



The "Key Technologies and Industrialization of New Generation High-voltage Ternary Low-cobalt Single Crystal Materials" project adopts precise co-precipitation, double in-situ coating and other technologies to solve the structural and interface stability problems of medium and high nickel single crystal materials under high voltage, and meet the new generation of power batteries for long endurance, ultra-fast charging and long cycle requirements. This product has outstanding innovation and leading performance, and its overall performance has reached the international advanced level and has been widely recognized by domestic and foreign customers. In addition, the industrialization of a new generation of medium-high nickel, low-cobalt, and high-voltage cathode materials has been achieved, with remarkable results. The "Development and Industrialization of High-Power Ternary Cathode Materials" project studies the key production technologies of high-specific-weight, low-impedance ternary high-power products, focusing on the development of key technologies for morphology synthesis and regulation. This technology not only fills the gap in the market of cathode materials for HEV in China, but also breaks the international monopoly on the technology of ternary cathode materials with high specific resistance and low impedance, cultivates a complete industrial chain from precursors to cathode materials, and can meet the demand for high-rate charge-discharge performance in the power field, with remarkable economic benefits. The overall technology of both achievements has reached the international advanced level.

Industry Alliances

Through the establishment of "project + talent + platform" innovation mechanism, the Company joined the Hunan Solid-state Battery Technology Innovation Consortium, and deeply participated in eight industry organizations such as Hunan Battery Industry Association, actively playing a bridge role and accurately grasping the development trend of the industry. It invested RMB 230 million in special scientific research funds throughout the year, implemented innovative incentive policies, stimulated the innovative vitality of scientific researchers, and provided core technical support for the high-quality development of enterprises.

The Company has joined the "Solid-State Battery Industry Innovation Consortium" organized by SASAC as a cathode supply chain participant. The Company has joined various industry associations and alliances, including the Hunan Battery Industry Association, Hunan Advanced Materials Industry Association, China Power Battery Recycling and Cascade Utilization Alliance, National Nonferrous Metals Standardization Technical Committee, Changsha-Zhuzhou-Xiangtan Advanced Energy Storage Materials Industry Alliance, Hunan Advanced Battery Materials and Battery Industry Technology New Strategic Alliance, China Industrial Association of Power Sources, and Changsha Association of Science and Technology for Enterprises and Institutions, helping the Company stay informed about industry trends and access market intelligence.





Case

Signing Ceremony of Cooperation Agreement Between Minmetals New Energy and Professor Ma Cheng's Team from USTC Successfully Held

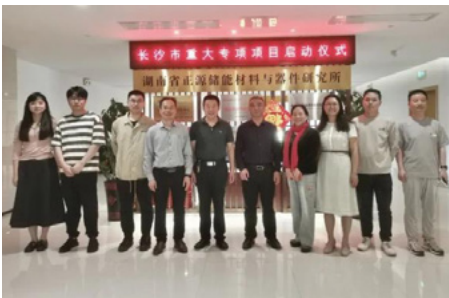
Minmetals New Energy successfully held a cooperation signing ceremony with Professor Ma Cheng's research team from the USTC and Guningjiyuan they founded. Zhang Jinjin, Vice General Manager of Minmetals New Energy, and Professor Cheng Ma from the USTC, signed a collaborative contract titled Development of High-Nickel Cathode Materials for All-Solid-State Batteries, agreeing to jointly develop cathode materials compatible with all-solid-state batteries within two years. In addition, the parties also signed a strategic cooperation agreement to strengthen multi-faceted cooperation, build an industrial ecosystem, and promote the commercial application of technology.



Case

Kickoff Meeting Successfully Held for Changsha Major Science & Technology Project Led by the Company

In May 6, the Launch Ceremony of the Changsha Municipal Major Science and Technology Project — “Key Technologies for the Preparation of Lithium Manganese Iron Phosphate Cathode Materials” — was successfully held at the Central South University Science and Technology Park. The project, led by the Company in collaboration with the Hunan Zhengyuan Institute for Energy Storage Materials and Devices, aims to address critical industry-wide technical challenges such as low conductivity, poor rate performance, and short high-temperature cycle life in lithium manganese iron phosphate (LMFP) cathode materials for lithium-ion batteries, thereby promoting the industrial application of next-generation LMFP technology.



5G Factory



Intellectual Property Protection

The Company places high importance on intellectual property protection. In compliance with the Patent Law of the People's Republic of China, the Patent Cooperation Treaty, and the Implementing Regulations of the Patent Law of the People's Republic of China, the Company has established internal management rules such as the Detailed Rules for Intellectual Property Management, the Detailed Rules for Scientific and Technological Achievements Management, and the Measures for the Administration of Science and Technology, to safeguard independent innovation achievements, promote technology transfer and commercialization, thereby providing intellectual property support for the Company's sustainable development. The Company has improved the quality of patent drafting and mining by collaborating with outstanding patent law firms, aiming to build a high-quality product patent portfolio. Additionally, it has introduced an industry-standard patent search system to strengthen in-house patent search and analysis capabilities, as well as enhance the construction of its patent database.

As of the end of 2024, the Company holds a total of

<b>162 valid patents</b> 117 invention patents 1 invention patent granted in Japan 44 utility model patents	<b>29 new domestic patent applications</b> 26 invention patents 3 utility model patents
<b>3 software copyrights</b>	<b>2 patent applications were filed under the Patent Cooperation Treaty (PCT)</b>
<b>21 new patents were granted</b>	18 domestic invention patents 3 utility model patents



# Collaborative Value Chain Management

## Governance

The Company has optimized the structure of the Supplier Management Committee in accordance with internal regulations such as the Measures for the Administration of Supplier, Measures for the Administration of Customer and Supplier Credit Risk, and Procurement Management Regulations, to clearly define functions at all levels, enable more efficient and specialized division of labor and collaboration, so as to guarantee meticulous "dedicated personnel for dedicated tasks" in all management activities.

## Strategy

The supplier management adheres to the principles of "unified management, dynamic evaluation, and selective retention". By building a risk management system for the entire supply chain, it achieves full cycle control from supplier admission to exit, ensuring supply chain stability and reducing procurement risks. In supplier quality management, the Company establishes a comprehensive evaluation system to dynamically assess suppliers and classify them into different grades, while implementing a "blacklist" mechanism to control the quality of supplied materials at the source.

Admission

The supplier admission process is conducted via the China Minmetals supply chain platform, involving the review of business licenses, credit status, qualification certificates, and system certifications. Indicators such as enterprise scale and financial status are also considered. Only upon passing the admission process can suppliers participate in bidding, quotation, and other business activities.

Management

The Company enforces a stringent quality management process that covers all stages including product introduction, random spot inspections, and comprehensive control over suppliers’ products, production, and sourcing.

Evaluation

Contract evaluations (including process and completion evaluations) and year-end evaluations are conducted through the supply chain management platform. Annual scores are consolidated to determine supplier grading, and non-compliant or blacklisted suppliers are restricted or prohibited from further use.

Audit

Key raw material suppliers are subject to unscheduled spot checks and annual audits. Unauthorized changes are strictly prohibited, and the use of materials from high-risk regions is forbidden to help suppliers identify and mitigate supply chain risks.



Risk, Influence and Opportunity Management

The Company has developed the Management Procedures of Responsible Minerals Supply Chain Due Diligence to guide the identification, prevention, and mitigation of risks in the supply chain of mineral resources that may be used as raw materials.

Integrity Management

The Company has established a supplier admission and exit mechanism to implement full-process management from onboarding to phase-out. By signing documents such as the Integrity Commitment Letter and Intellectual Property Registration Form, the Company closely monitors risks related to supplier integrity, unauthorized changes, supply chain mineral sourcing, intellectual property protection, and operational risks to ensure suppliers operate in compliance.

Responsible Procurement

The Company has formulated the Trade Business Implementation Rules to innovate trade channels and expand handling approaches in response to risks such as raw material overstock and price volatility. It has also implemented the Management Procedures of Responsible Minerals Supply Chain Due Diligence to carry out due diligence in line with the Responsible Critical Mineral Initiative (RCI), requiring suppliers to sign compliance declarations to ensure that the sources of minerals meet international standards.

Green Supply

The Company advocates the use of recycled raw materials and promotes the development of a green supply chain. Environmental and social responsibilities are integrated into management practices to reduce resource consumption and carbon emissions.

Diversified Layout

For key products, the Company has deployed multiple alternative suppliers across regions to mitigate supply risks caused by seasonal or policy-related force majeure events. A long-term procurement model is promoted to enhance cooperation stability, with long-term suppliers being upgraded to strategic partners.

Emergency Response

The Company has formulated the Special Procurement Management Procedures for Materials, establishing an emergency review mechanism to address supply chain disruptions and enable short-term use or emergency procurement of suppliers or products listed outside the qualified directory.

Digital and Intelligent Management

The Company has developed a digital dashboard system on its supply chain platform, enabling full-process traceability and recordkeeping from procurement to sales. Real-time data visualization ensures compliance and standard conformity across all stages.

Indicators and Targets

Minmetals New Energy also ensures supply chain security through technological innovation and industrial upgrading. As a "Three Products" benchmark enterprise in Hunan Province, the Company leverages its subsidiary, the "Hunan Provincial New Materials Pilot Platform", to enhance technological conversion capabilities, and continues to develop lithium iron phosphate products. At the same time, the Company secured approval for two "unveiling and commanding" projects targeting key products in Hunan Province's manufacturing sector. It also passed three scientific and technological achievements evaluations, including "Development and Industrialization of Key Technologies for High-Energy-Density Single-Crystal Ni-Rich Ternary Cathode Materials" and "Key Technologies and Industrialization of High-Voltage, High-Rate Polycrystalline Cathode Materials and Their Precursors for Lithium-Ion Batteries". Additionally, leveraging its provincial-level platform qualifications and improved efficiency in achievement transformation, the Company has established a safety system encompassing product performance, technological reserves, industrial capabilities, and quality standards, enhancing upstream-downstream collaboration and effectively addressing market challenges.



# Public Welfare Benefits Society

## Welfare Activities

Minmetals New Energy complies with the relevant provisions of the Measures for the Administration of Donation of China Minmetals Corporation and has formulated its own Measures for the Administration of Donation. The Company actively carries out public welfare initiatives in areas such as poverty alleviation, educational support, and voluntary blood donation. In 2024, the Company organized a total of 22 volunteer initiatives and donated RMB 28,000 in financial aid to support 3 students from underprivileged families in Huayuan County, the designated assistance area.

## Rural Revitalization

Minmetals New Energy, responding to the national rural revitalization strategy, contributes modestly to advancing rural revitalization and accelerating agricultural and rural modernization. By combining "blood transfusion" with "blood making", the Company focuses on education, consumption, and employment as key drivers, synergized with industrial technology empowerment, to inject sustainable development momentum into rural revitalization.

In 2024, Party Committee members of the Company led teams to conduct on-site research in multiple locations, visiting and offering condolences to assisted families, and provided targeted educational grants to support financially disadvantaged students, aiming to break the cycle of intergenerational poverty through educational assistance.

Additionally, the Company focuses on consumption-based assistance to support the development of specialty agricultural products in Huayuan County, its designated regions. By opening new markets and expanding sales channels, the Company purchased specialty agricultural products from assistance regions such as Shibadong Village through centralized trade union procurement, cafeteria sourcing, and other means throughout the year. It also actively participated in initiatives such as the "Assistance Through Consumption Campaign by Central SOEs", and encouraged its employees to voluntarily purchase goods to broaden sales channels for agricultural products and boost farmers' incomes.

The Company also provides employment assistance to supported regions by actively engaging with seven designated counties. It has offered 14 job positions covering multiple fields such as production and management, enabling local residents to secure employment near their homes and enhance their self-development capabilities.

Case

Minmetals New Energy Granted RMB 28,000 Scholarships to Students from Impoverished Families

In November 2024, the research team from Minmetals New Energy visited households receiving assistance in Lianghe Village and Mala Village, Huayuan County, to offer condolences and conduct surveys. The Company donated RMB 28,000 in financial aid to three underprivileged students, aiming to improve rural education quality, break the cycle of intergenerational poverty, and inject talent vitality and sustainable momentum into rural revitalization.



# 03

## Governance Section Multi-stakeholder Co-governance for Collaborative Development

Minmetals New Energy has always stayed true to its founding mission, with Party building as the guiding principle, advancing governance modernization in compliance with regulations. The Company continuously optimizes its organizational structure, enhances the functions of the Board of Directors and Board of Supervisors, and strengthens the capabilities of the management team to fully empower the Board and standardize delegated authority management. In terms of lawful and compliant operations, the Company has established an integrated system for internal control, internal audit, compliance, and risk management to uphold legal integrity and reinforce clean governance. Meanwhile, the Company places high importance on investor relations, safeguards the rights and interests of shareholders and creditors, and ensures information disclosure in accordance with regulations.



# Adhering to Party Building and Guide

The Company strictly adheres to relevant intra-Party regulations such as the Constitution of the Communist Party of China, the Regulations on the Work of Branches of the Communist Party of China (For Trail Implementation), and the Guiding Opinions on Strengthening the Party Leadership in Central SOEs' Corporate Governance Improvement, and has established 23 internal management systems including the Work Rules of the Company's Party Committee and the Work Rules of the Company's Party Building Leading Group. In line with the Company's equity structure and mixed-ownership characteristics, it firmly upholds the fundamental principle of "maintaining the two consistencies" to establish a sound modern corporate governance system featuring 'the Party organization steering direction, the Board of Directors making strategic decisions, and the executive management overseeing operations". Specifically, the Board of Directors is responsible for "setting strategy, making decisions, and mitigating risks"; the Party Committee ensures "providing direction, managing the overall situation, and ensuring implementation"; and the Executive Management Team focuses on "business planning, execution, and management enhancement". The Company will advance these efforts in an integrated manner and achieve five 100% targets under the same standards:

**100% of subsidiaries will have Party building incorporated into their articles of association, 100% of Party secretaries will concurrently serve as chairman (or executive director), 100% of Party organizations will establish rules for decision-making, 100% of Party organizations will implement the pre-discussion procedure for major issues, and 100% of Party organizations will have their operational funding fully secured, so as to ensure the integration of Party leadership into every aspect and throughout the entire process of corporate governance.**

The Company will further advance the reform of implementing fixed-term and contracted management for the managerial team. All members of the Executive Management Team will be subject to term-based appointments, with their positions and compensation strongly linked to business performance.

# Political Development

The Company's Party Committee will firmly uphold the "Two Upholds" as the highest political principle, and will firmly uphold the "two safeguards" as the fundamental political discipline, conscientiously implement the decisions and arrangements of the CPC Central Committee and the work arrangements of the superior party organizations, formulate the "Measures for the Administration of the Company's Implementation of General Secretary Xi Jinping's Important Instructions" and the "Implementation Measures for the "First Priority" System of the Company's Party Committee", and improve the "Log of Company's Implementation of General Secretary Xi Jinping's Important Instructions" to ensure that the work is always aligned with the spirit of the Party Central Committee and the requirements set by higher-level Party organizations. By strengthening the study of party discipline and political training, the political judgment, political understanding, and political execution of primary-level party branch secretaries and party affairs staff have been effectively improved, guiding party members and cadres to better perform their duties. In 2024, the Company has conducted study sessions on 28 policy directives and formulated 28 corresponding implementation measures.

# Ideological Development

Focus on achieving a deeper understanding by making solid efforts to study and comprehend thoroughly. The Company has always regarded the study of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era as its primary political task, strictly implemented the "First Priority" learning system, and set the study of the Party Committee's Theoretical Central Study Group as a "major course".

Focus on achieving thorough understanding by emphasizing internalization. The Company has fully implemented the spirit of the 20th National Congress of the Communist Party of China and the Third Plenary Session of the 20th CPC Central Committee, and focused on studying and discussing General Secretary Xi Jinping's new ideas, new viewpoints, and new conclusions on comprehensively deepening reform. The primary-level Party organizations have effectively motivated Party members and cadres to devote themselves to reform and development and strive for excellence by organizing activities such as the "Discussion on Practicing in Posts and Developing New-Quality Productive Forces" through the "Three Meetings and One Lecture" system alongside the study and implementation of the plenary session spirit, along with educational campaigns like "Promoting the Plenary Session Spirit and Deepening Enterprise Reform" and the special education initiative "60-Day Sprint for a Year-End Boom".

Focus on achieving 'transformation' by emphasizing practical application of knowledge. The Company adheres to integrating Party building with production and operations, leveraging the "Five Reliefs" mechanism to foster employee consensus, namely, an ideological and political work mechanism to address employees' concerns in thought, relieve mental burdens, enrich cultural needs, alleviate psychological pressure, and resolve practical difficulties, ultimately unify minds, consolidate shared purpose, and drive collective efforts, so as to provide strong ideological assurance for advancing the Company's high-quality development.

In 2024, the Company's Party Committee's theoretical study group conducted 10 centralized study sessions, implemented 22 "First Priority" study sessions, and ensured all Party member cadres completed an average of over 48 hours of political theory study. The senior managerial staff and Party organization secretaries delivered 83 Party lectures, with over 300 participations from Party members and cadres.

**The ninth Centralized Study Session of the Party Committee's theoretical study group in 2024**



### Case

### Conference on Disseminating the Spirit of the Plenary Session

In September 11, Liuquan Hu, Party Secretary and Chairman of Minmetals New Energy, delivered a speech on the theme of "Study and implement Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and the spirit of the Third Plenary Session of the 20th CPC Central Committee, and achieve annual goals and tasks with greater efforts and more practical measures" to all party members and cadres of the Company. General Manager and Deputy Party Secretary, Zhang Zhen, and other members of the Party Committee attended the presentation session. Deputy Party Secretary Lu Yaohui presided over the session.

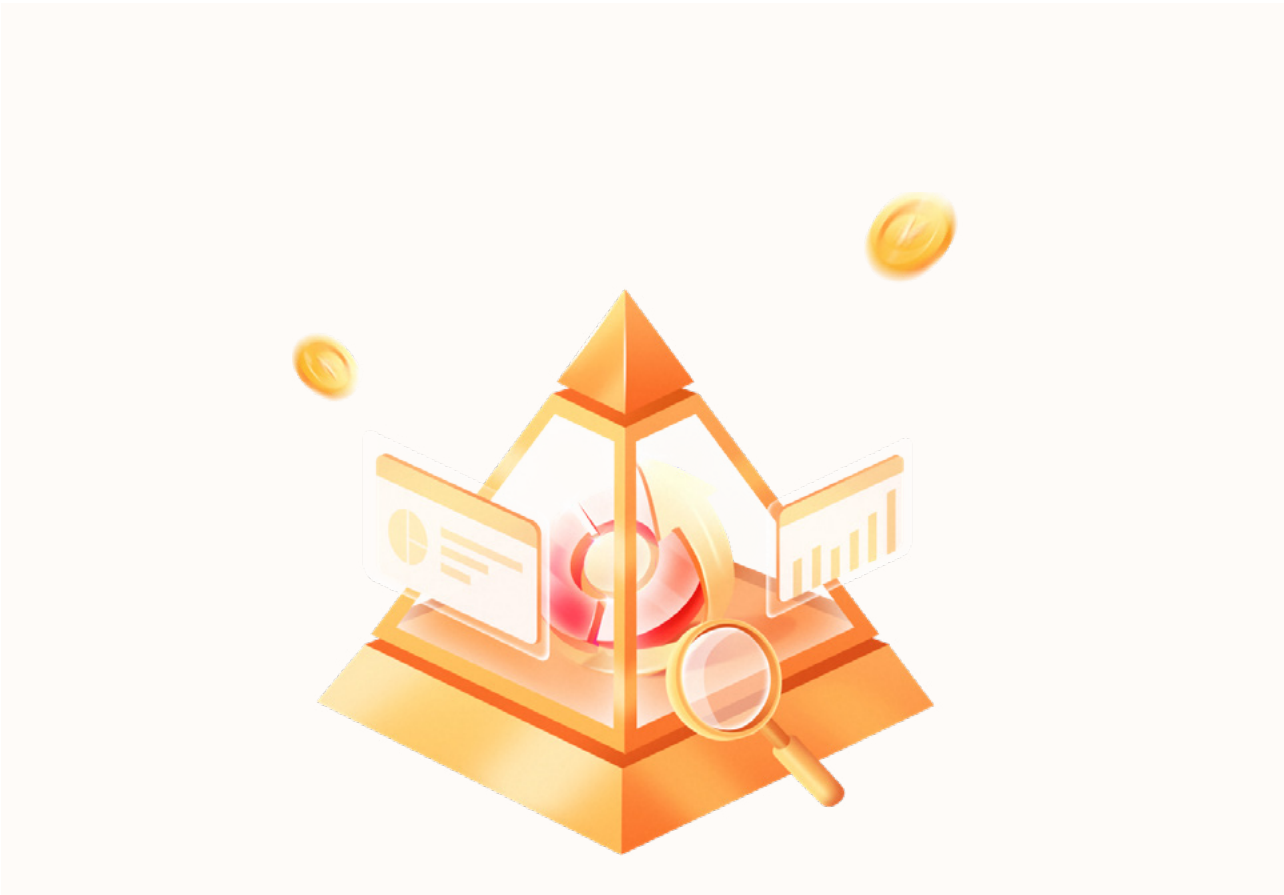


## Organizational Development

The Company currently has more than 300 party members, adhering to the working mechanism of "monthly supervision, quarterly inspection, half-year evaluation and promotion, and annual inspection", establishing the orientation of "all work to the branch", and taking the responsibility of focusing on the grassroots and the branch, and promote construction of primary-level party organizations by taking "standardization and normalization" as the criterion. The Company continues to optimize the party organization structure to ensure that the principal person in charge of the department "shoulders both party and government administration".



The Company regularly implements the reminder mechanism for party organization term changes and adjustments, urges all primary-level party organizations to complete the election and adjustment of members in a timely and standardized manner, select and strengthen branch secretaries and branch committee members, to ensure the continuity of grassroots organizational strength. Meanwhile, the revised Party Membership Fee Collection, Use, and Administration Measures for Primary-level Party Organizations in the Company was issued to standardize the scope of use and approval procedures for Party fees. In accordance with requirements, the Party Committee's dedicated Party fee account has been transferred to the financial department for management, further strengthening the standardization of Party fee collection, use, and administration within the Company.



# Optimizing Corporate Governance

## Organizational Structure

The Company strictly complies with relevant laws and regulations such as the Company Law, Securities Law, Code of Corporate Governance for Listed Companies, and Rules of the Shanghai Stock Exchange for Listing Stocks on the Sci-Tech Innovation Board, and has established internal governance documents including the Articles of Association, Rules of Procedure for the General Meeting of Shareholders, Rules of Procedure for the Board of Directors, Rules of Procedure for the Board of Supervisors, and Measures for the Administration of Independent Directors, to establish a governance structure with the General Meeting of Shareholders, Board of Directors, and Board of Supervisors serving as respective authorities for decision-making, execution, and oversight. With clearly defined responsibilities and collaborative interaction among all governance bodies, effective operation of corporate governance mechanisms can be ensured. The General Meeting of Shareholders is the highest authority of the Company, responsible for deciding on the Company’s business policies and investment plans. In 2024, five General Meetings of Shareholders were held.

The Company is committed to achieving fairness and diversity in the composition of the Board of Directors, carefully balancing factors such as gender, professional expertise, and backgrounds to ensure scientific and comprehensive decision-making, thereby driving the Company's continuous progress. The Board of Directors has established four specialized committees: The Audit Committee, the Nomination Committee, the Strategy Committee, and the Remuneration and Appraisal Committee, with defined scope of responsibilities and detailed implementation rules formulated for each committee. All committees give full play to their professional expertise to ensure the legality, scientificity, and correctness of the collective decision-making of the Board of Directors, effectively enhance the transparency and efficiency of corporate governance, and further solidify the foundation for the Company's long-term and stable development.



The Board of Supervisors, as the Company's supervisory body, is responsible for monitoring the financial status, business operations, and the performance of directors and senior management. It has the authority to review financial materials, rectify violations, propose the convening of interim shareholder meetings, submit proposals, and, when necessary, file lawsuits against directors and senior management, all dedicated to safeguarding the legitimate rights and interests of the Company and its shareholders. As of the end of the reporting period, the Board of Supervisors consists of 3 members, with two employee representative supervisors. Female representation on the Board reaches **66.6%**.

## Compensation and Training for the Management

To ensure transparency and reasonableness in the management compensation decision-making process and pay structure, the Remuneration and Appraisal Committee recommends compensation policies and their formulation procedures to the Board of Directors. After thorough consideration of industry benchmarks, position responsibilities, tenure length, company performance, and risk exposure, it reviews and determines the compensation and incentive packages for senior executives.

In 2024, the training coverage rate for directors, supervisors, and senior management in office reached **100%**.

Meanwhile, the Company's Board of Directors places great emphasis on enhancing the professional competencies of directors, supervisors, and senior management. It regularly arranges for relevant personnel to participate in specialized training programs, ensuring they stay abreast of cutting-edge industry trends and comprehensively improve their professional capabilities, so as to provide solid support for the scientific rigor of the Company's strategic decision-making and the efficiency of its operational management. The training program includes specialized courses from the Shanghai Stock Exchange as well as diverse training initiatives from other relevant institutions, employing various training methods to enhance participants' understanding and execution capabilities in corporate governance and ESG management.

## Effectiveness Evaluation for Board of Directors

The Company has actively implemented the Board of Directors' authority. Since the establishment of its second-term Board of Directors of directors in 2022, a total of **30** board meetings have been held, with **134** proposals reviewed and approved. The Implementation Plan for Exercising the Board of Directors' Authorities has been formulated and implemented, and the List of Decision-Making Items and Processes at the Headquarters has been revised. Strictly standardize the authorization of Board of Directors. The Measures for the Administration of Board Authorization was formulated to clarify management requirements for authorization plan development, execution, implementation, oversight, and adjustments, based on the Company's operational decision-making needs.Strengthen the internal governance of the Board of Directors. With the Board of Directors as the responsible entity and the Chairman as the primary responsible person, formulate and implement the Measures for the Administration of Information Disclosure. In strict compliance with regulatory requirements, the Company ensures that major matters undergo rigorous procedures.



# Lawful and Compliant Management and Control

## Internal Control

In line with regulations such as the Basic Standards for Enterprise Internal Control and Supporting Guidelines, the Company has established internal control supervision mechanisms, including the Internal Control Evaluation Measures, Measures for the Administration of Internal Control Audit, Internal Audit Management Regulations, Internal Audit Project Management, Measures for Investigating Liability for Illegal Business Investment, and Measures for the Administration of Rectifying Audit Findings, and carried out annual evaluations to correspond internal control standards with rules and regulations, and completed inspections and assessments in all areas including corporate governance, listing compliance, integrity, safety and environmental protection, production quality, and contract texts. Through this series of measures, the Company will continue to improve its internal control system, enhance its core momentum, improve its core competitiveness, and lay a solid foundation for high-quality development.

## Internal Audit

Under the leadership of the Company's Audit and Accountability Supervision Leading Group, the internal audit department has consistently adhered to the working philosophy of "strengthening oversight, promoting management, preventing risks, and creating value", closely aligning with the Company's key strategic priorities, carried out all audit activities in strict accordance with the Company's strategic objectives and overall development goals, fully leveraging audit professional capabilities, audit management expertise, and audit service competencies. First, the Company has organized and held leading group meetings to thoroughly study and implement the spirit of the 20th National Congress of the Communist Party of China, the first meeting of the 20th Central Audit Committee, and General Secretary Xi Jinping's important speeches and important instructions on

audit, and study and implement relevant audit; Second, the Company's Party Secretary and chairman Hu Liuquan has always insisted on high-level leadership, attached great importance to audit, personally arranged and deployed, personally followed up and supervised, and actively promoted the arrangements and deployments of the National Audit Office, the SASAC, and the Group on audit to be implemented in Minmetals New Energy.

## Regulatory Compliance in Business Practices

The Company adheres to the philosophy of "respecting the law, complying with regulations, and creating value", strictly following group compliance guidelines such as the Economic Sanctions and Export Control Compliance Guidelines, Corporate Governance Compliance Guidelines, Business Partner Compliance Guidelines, and Intellectual Property Compliance Guidelines. Internally, it has established a series of compliance regulations, including the Measures for the Administration of Compliance, Implementation Rules for Legal Compliance Management of Overseas Business, Guarantee Compliance Guidelines, Contract Review Key Points Compliance Guidelines, Overdue Account Management Guidelines, and International Arbitration Institution Selection Guidelines, to build an effective, interconnected, and multi-level compliance management system that covers all areas, integrating compliance into corporate strategy, embedding compliance requirements into business processes, and fostering a culture of compliance within corporate values, and remain committed to preventing major compliance risks, strengthening compliance competitiveness, and laying a solid foundation to become a global leader in the new energy materials industry.

The Party Committee, the Board of Directors, and the Executive Management Team perform their respective duties.

The Party Committee strengthens top-level design and promotes the implementation of compliance work plans.

- The Board of Directors reviews and approves compliance policies, programs, and other documents, making decisions on major compliance matters.
- The Executive Management Team drafts compliance system construction plans and organizes responses to major compliance risk incidents.
- The compliance management system construction group researches and decides on key issues.
- The General Legal Counsel (Chief Compliance Officer) conducts compliance reviews of important contracts and major business decisions, leads the handling of significant dispute cases, and ensures that relevant decisions comply with laws and regulations.
- Various functional departments and business departments/divisions bear primary responsibility for compliance management.



The Company has taken compliance review as a key initiative, achieving a 100% legal review rate for regulations, economic contracts, power of attorney, and major decisions throughout the year, and has reviewed significant number of contracts, authorizations, policies, and decisions, and provided with a large portion of the suggestions being highly adopted. The Company embeds compliance review checkpoints into workflow processes, with compliance officers deeply involved in all phases of major investment projects, and resolutely implements the "no decision without legal review, no unlawful decisions" mechanism to build a comprehensive compliance risk prevention chain.

"Three Lists and One Process"

- "Risk Identification List"**

The Company organizes all departments to systematically review external laws and regulations, national policies, industry standards, and internal corporate rules, consolidate liability clauses that violate compliance obligations, identify 1,900 compliance risk points across 13 domains, and categorize them into high, medium, and low impact levels to formulate a "Risk Identification List"
- "Compliance Duty Checklist for Positions"**

The Company has organized total of 92 key personnel to establish 720 specific responsibilities based on their roles, incorporating requirements from both business and supervisory departments, and to reflect the responsibility compliance reviews, compliance management, and compliance actions, forming a "Compliance Duty Checklist for Positions"
- "Process Control Checklist"**

Based on the risk identification checklist and position-specific compliance responsibility checklist, all departments analyze and evaluate business management systems and processes to identify gaps and deficiencies in meeting compliance requirements. In accordance with these requirements, 90 process control measures have been developed, specifying their control objectives, responsible departments and personnel, control frequency, and other details, so that the compliance requirements are integrated into business management systems and processes to form a "Process Control Checklist".



The Company also places emphasis on fostering a culture of compliance. The Company has organized learning of Xi Jinping Thought on the Rule of Law, national security and confidentiality, labor relations, Bidding Law of the People's Republic of China, data protection, financial management, contract management, intellectual property rights, workplace safety, and supply chain compliance training, and actively carried out compliance publicity, to strengthen employees' compliance awareness.

#### Case The First Interactive Exchange Event for 2024 of the Central SOE Legal Work Collaboration Group (Group 8)

In April 12, 2024, the first interactive exchange event for 2024 of the Central SOE Legal Work Collaboration Group (Group 8), hosted by the Policy and Regulation Bureau of SASAC of the State Council, and organized by the Central SOE Legal Work Collaboration Group of China Minmetals Corporation was successfully held at Minmetals New Energy.

Various departments held discussions on topics such as improving corporate governance structures in line with the new Company Law and the "reducing backlog, controlling new cases" initiative. The Legal Department of Minmetals New Energy shared specialized insights on intellectual property management, and expressed that it will effectively play the supporting and guaranteeing role of the rule of law in enhancing the core competitiveness of enterprises and promoting high-quality development, and actively promote the rule of law in enterprises, to prevent and resolve litigation risks.



#### Case Themed Legal Education Campaign

In September, In order to implement Xi Jinping Thought on the Rule of Law, effectively strengthen the legal education of the Company's employees, improve the legal awareness of all employees, and strengthen the prevention and control of legal risks such as "pornography, gambling and drugs", "drunk driving and drunk driving", and "online loans", on September 13, 2024, Minmetals New Energy invited Wu Xianhua, a senior professor of law and well-known lawyer at the Party School of the CPC Changsha Municipal Committee, to carry out special legal education. The Legal Department has compiled and interpreted the regulations on handling and punishing common illegal cases in the Group and the Company's systems.



In 2024, the Company clearly defined a checklist of 65 mandatory compliance review items and established a dual-review mechanism involving both legal affairs and the general counsel for major decisions. It strictly enforced a 100% review rate for policies, contracts, authorizations, and project documents. Additionally, the Company conducted a self-assessment of its compliance system against 43 key indicators, and developed and rigorously implemented corrective action plans to address any identified gaps.



Risk Management

The Company strictly complies with the Comprehensive Risk Management Guidelines for Central Enterprises and the Basic Norms for Internal Control of Enterprises. It has established the Company Comprehensive Risk Management Regulations and the Measures for the Administration of Company Risk Management Reporting, continuously improving a well-defined and systematic risk management framework, forming a strategic decision-making of the Board of Directors as the core, an execution-oriented executive management team, and a collaborative three-lines-of-defense model (business units, risk control/functional departments, and audit department) as key safeguards, and the coordinated control of the three lines of defense as the support, promotes the construction of information systems such as treasury, BI, MES, and WMS, and continues to promote the gradual transformation of the internal control system from "human defense and control" to "technical defense and control". The Company has focused on key areas, established a mechanism for dynamic assessment and monitoring of major risks, accelerated the construction of a digital risk control platform, promoted the upgrading of risk prevention and control capabilities, and accelerated the improvement of a comprehensive, efficient, and coordinated risk management system, so as to provide solid guarantees for sustainable development.

Process	Measures and results during the reporting period
Risk Assessment	The risk management department has organized an annual risk assessment at the company level, closely integrated with the Company's business and management objectives, comprehensively evaluated important risks, scientifically formulated response strategies for the top ten risks, and focused on prevention and control. In 2024, the Risk Management Department employed a combination of methods such as interviews and questionnaire surveys to conduct annual material risk assessments through a top-down and bottom-up approach. A total of 26 key risks were identified, with 78 critical monitoring indicators and warning thresholds developed as part of the initiative. A tiered management mechanism was established, classifying risks into red (strict control), yellow (warning), and green (normal operation) zones, thereby enhancing the precision and effectiveness of risk management.
Risk Monitoring	The Company has established a major risk response checklist, clarified the division of responsibilities between lead departments and implementation departments, strengthened accountability for risk management across all staff, and maintained quarterly tracking of major risks to enhance the application of risk monitoring results, provide timely warnings, and oversee risk response measures. In 2024, focusing on the Company's top 10 key risks, the Company established a risk response inventory and formulated 41 countermeasures, and regularly collected both internal and external risk information.

Process	Measures and results during the reporting period
Risk Tracking	<p>In 2024, the Company continued to optimize its multi-tier risk management reporting mechanism, implemented emergency reporting procedures for major risk incidents, and maintained ongoing monitoring of occurred risk events. It routinely collected both internal and external risk information, issued risk alerts, and facilitated proper resolution of risk incidents. For risk events that have been disposed of, it promptly closed the closed loop to ensure the effective functioning of the risk prevention and control system for all personnel, processes, and systems.</p> <p>Adhering to the principles of risk classification management, hierarchical management, and centralized management, the Company strengthens risk prevention and control in key areas, and formulates risk control strategies based on classification, to enhance the monitoring and early warning mechanism for major risks. Utilizing information technology, the Company integrates the data flows of the six core systems of sales, procurement, material control, warehousing, finance, and risk control, and vigorously builds a full-chain visualization platform to accurately empower business operations, timely warn of major risks, quantitatively support risk decision-making, to further improve the level of dynamic risk warning, and build a resilient line of defense for the Company's sustainable development.</p>
Risk Control	<p>The Company has strictly prevented HSE risks, strengthened safety and environmental protection supervision, promoted the rectification of hidden dangers, and organized various special emergency response drills and warning education. No serious injuries or above workplace safety accidents occurred throughout the year, no general or above environmental pollution incidents occurred, and no new cases of occupational diseases occurred.</p> <p>The Company has strictly prevented credit risks, dynamically carried out "red, yellow and blue" risk ratings, strengthened intelligent risk warnings, and established an online merchant credit rating model to improve efficiency by 66%, and specially promoted key overdue collection to prevent and resolve major overdue risks.</p> <p>The Company has strictly prevented price risks, strengthened budget management, and coordinated production, sales and inventory balance, to strictly control inventory.</p> <p>The Company has strictly prevented the risks of industrial restructuring, increased efforts in customer development, and achieved results in the lithium iron phosphate market.</p>



Process	Measures and results during the reporting period
Risk Control	The Company has strictly prevented risks in the industrial chain, steadily promoted resource regeneration and recycling cooperation projects, actively negotiated nickel and phosphorus resource guarantees, and moved towards the direction of industrial chain integration.
	The Company has strictly prevented the risk of policy restrictions in Europe and the United States, paid close attention to changes in new energy tariff policies in Europe and the United States, and accelerated the international strategic layout, to help promote overseas markets and deliver products.
	The Company has strictly prevented the risk of insufficient human resources supply, continuously improved talent planning, and strengthened echelon construction, to effectively guarantee talent demand.
	The Company has strictly prevented intellectual property risks, improved the intellectual property management system, continuously enhanced patent reserves, strengthened the mining of high-value patents, and conducted patent infringement warning retrieval and analysis, to improve risk prevention and control capabilities.
	The Company has strictly prevented compliance management risks, improved the hierarchical and classified compliance management system, optimized and improved the "three compliance checklists" of compliance management, and drawn 90 new compliance process diagrams, covering 540 key nodes in the fields of finance, security, operations, etc., to form a practical compliance process list manual.
	The Company has strictly prevented public opinion risks, properly carried out public opinion monitoring, taken multiple measures to consolidate the ideological foundation, and strengthened confidentiality awareness, to keep a tight control on information disclosure.
Among the above 10 major risks, 3 risks (price risk, talent loss risk, and policy risk) showed a downward trend, 1 risk (credit risk) increased due to market influence, and the remaining 6 risks remained stable and the same as the previous period.	

During the reporting period, the Company did not incur any significant losses, nor was it involved in external litigation or subject to penalties from regulatory authorities.

## Taxation Management

The Company complies with national tax laws and regulations as well as the unified tax management system of Minmetals, and has established tax management rules tailored to its business characteristics, including the Measures for the Administration of Tax and Invoice Management System. The tax department collaborates with finance, legal, and business operations departments to ensure that tax compliance is synchronized with business development.

<b>Tax Compliance Management</b>  <b>Daily Tax Compliance:</b> Strictly execute declaration and payment procedures for VAT, corporate income tax, environmental protection tax, etc., ensuring data accuracy and timeliness.  <b>Tax Incentives:</b> Proactively apply for new energy and high-tech enterprise tax incentives to reduce tax liabilities.  <b>Cross-border Taxation:</b> For import/export or international operations, ensure compliance with customs duties, VAT refunds, and transfer pricing regulations.
<b>Tax Risk Prevention and Control</b>  <b>Internal Controls:</b> Conduct internal audits and tax risk assessments (e.g., identifying risks through related-party transaction pricing, invoice management loopholes).  <b>Audit Preparedness:</b> Establish tax inspection response protocols, maintain complete business documentation, and conduct regular tax health checks.
<b>Tax Informatization Management</b>  Utilize ERP systems such as SAP or UFIDA, or specialized tax management systems to achieve automated tax data processing, declaration, and monitoring, thereby reducing human errors.
<b>Invoice and Contract Management</b>  Strictly implement the process of issuing, receiving, and storing VAT invoices, and clearly define tax responsibilities in contract terms.

## Observing Business Ethics

### Integrity Construction

The Company strictly complies with laws and regulations such as the Criminal Law, Supervision Law, and Anti-Money Laundering Law, and rigorously adheres to both Party discipline and national laws. It has established internal policies including: Measures for Handling Whistleblowing and Complaint Reports, Supervisory Inspection Measures for Three Majors and One Large, Implementation Rules for Oversight of the Central Eight-Point Directive on Conduct, Procedures for Registration and Disposal of Gifts, Cash Gifts, and Souvenirs, Employee Disciplinary Action Guidelines (Trial), Work Guidelines for Primary-Level Party Organizations Reporting Major Issues to Discipline Inspection Bodies, Implementation Measures for Conducting Integrity Talks with Key Position Personnel, and Measures for Implementing the Accountability System for Party Conduct and Integrity Building, to create a compliant and integrity-driven operating environment, standardize employee conduct, prevent corruption, and safeguard stakeholder rights, thereby ensuring the Company's sustainable development.

Standardize the honest professional behavior of all the Company's cadres and employees, and carry out various production and operation activities in an open and transparent manner. Firmly oppose "petty corruption" among all production and operation management cadres and front-line employees, maintain a 'zero-tolerance' stance toward corruption and strictly prohibit any form of commercial bribery.

The Company has established and improved a clean reporting mechanism to protect the rights and interests of confidential reports and whistleblowers in accordance with regulations. The channels for reporting are disclosed and kept confidential through official addresses, email addresses, reporting phone numbers, WeChat, and other channels. Relevant departments conduct irregular special oversight campaigns. Discipline inspection and audit departments supervise key areas in accordance with the Bidding Law of the People's Republic of China and other regulations, advance the rectification of irregularities in engineering projects, hold responsible parties accountable, and standardize approval procedures, to oversee maintenance, simplification, and technological upgrading projects to improve institutional frameworks. The Company has identified integrity risks in operations, standardized management procedures, and developed a prevention and control checklist, and also conducted compliance training for employees at all levels to foster a culture of integrity, creating a fair, just, and trustworthy business ecosystem.

In 2024, the Company handled 7 problem clues, initially closed 5 cases, filed 2 cases, punished 7 people, and issued 3 disciplinary inspection recommendations. In 2024, the Company has no incidents of commercial bribery, corruption, or related lawsuits, and has demonstrated excellent business ethics, effectively maintaining a clean operating environment.

#### 2024 Annual Conference on Party Conduct, Integrity, and Anti-Corruption Work and Warning Education Session





## Anti-Monopoly and Anti-Unfair Competition

The Company strictly complies with laws and regulations including the Anti-Monopoly Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, the Provisions of the State Council on the Standards for Merger Control Filing, the Provisions on Prohibiting Monopoly Agreements (Interim), and the Regulation on Prohibiting Abuse of Dominant Market Positions (Interim). In accordance with the Anti-Monopoly Compliance Guidelines of China Minmetals Corporation and the Company's internal Measures for the Administration of Compliance, on the basis of comprehensively promoting compliance management, combined with compliance risk assessment, it focuses on strengthening compliance management in the fields of anti-monopoly and anti-unfair competition, and operates in compliance with all applicable anti-monopoly, fair trade and anti-unfair competition laws and standards at home and abroad, in the countries and regions where business is conducted, to ensure healthy competition with competitors, and maintain normal business dealings with customers, suppliers and sellers, thereby preventing monopolistic behavior.

In 2024, the Company organized compliance training covering key areas such as common legal risks, intellectual property, safety and environmental protection, quality control, antitrust, and anti-unfair competition, reaching approximately 4,500 participants in total. Additionally, the Company launched a "Compliance Promotion Month" campaign, which included activities like signing compliance commitment pledges and hosting compliance knowledge competitions to enhance overall compliance awareness among all employees. The Company has not been subject to litigation or major administrative penalties due to unfair competition practices.



## Working Hand in Hand for Shared Success

### Investor Relations Management

The Company places high importance on communication with investors and continuously enhances investor relations management. To protect investors' rights and interests and enhance capital market recognition, the Company has formulated Measures for the Administration of Investor Relations in accordance with regulatory documents such as the Working Guidelines for the Relationship Between Listed Companies and Investors, to increase communication frequency and adopt innovative approaches, and actively engage with investors through multiple channels including the SSE E-Interaction platform, roadshows, reverse roadshows, investment conferences, and online meetings.

In 2024, the Company organized 4 performance briefing sessions, 1 "Visit to Listed Companies" event, and more than 30 on-site investor research activities, receiving over 100 investors. Through multi-level communication channels, investors have a more comprehensive understanding of the Company's core values and development strategies, which is conducive to establishing long-term, stable, and trustworthy cooperative relationships between the Company and investors.

### Shareholders' and Creditors' Rights and Interests

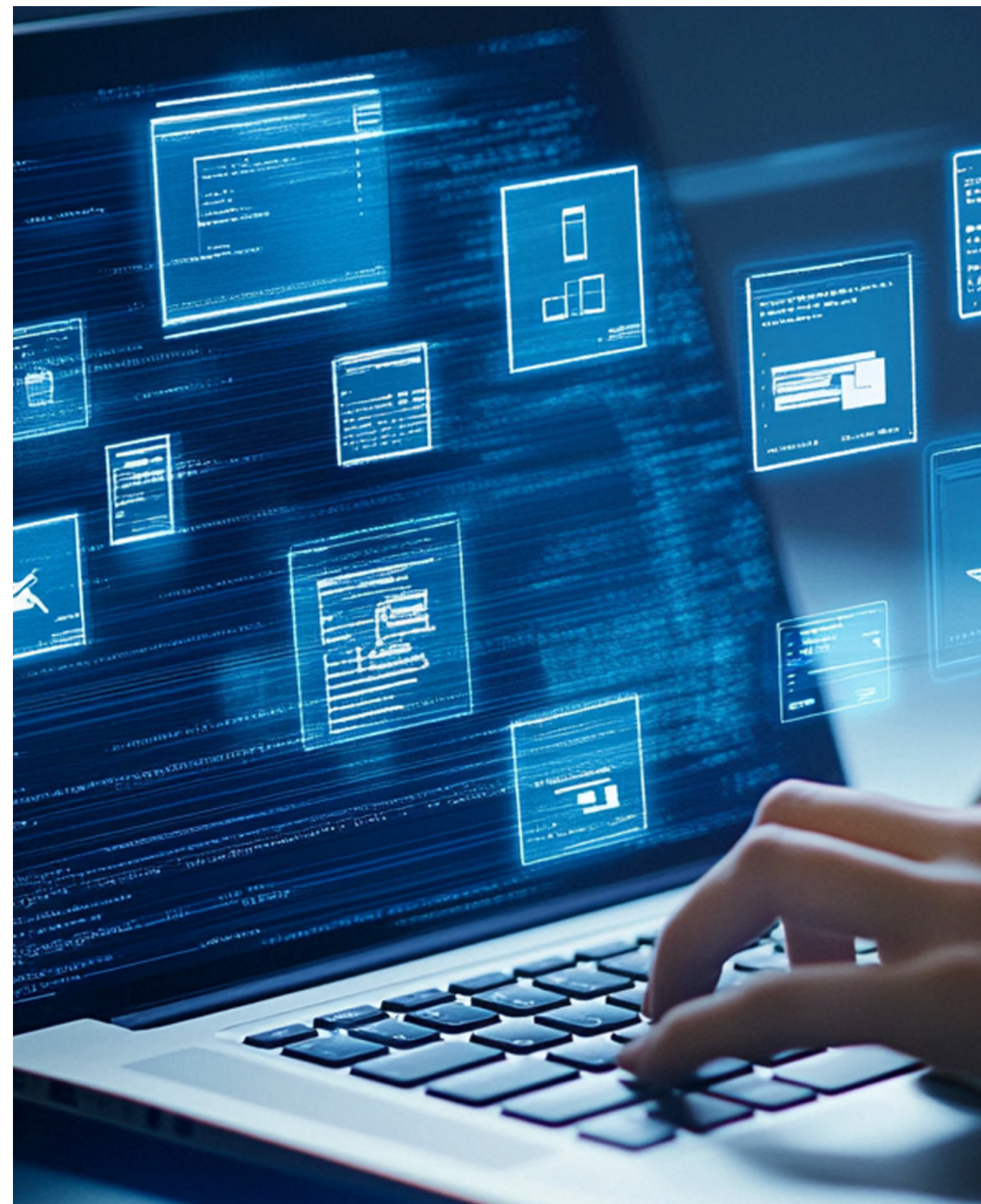
The Company, complying with relevant regulations such as the Company Law and the Securities Law, regards safeguarding the legitimate rights and interests of shareholders and creditors as important duties. By regularly disclosing the Company's financial status, operating results, and major decisions to shareholders and creditors, information asymmetry can be avoided, allowing shareholders and creditors to timely and fully understand the Company's dynamics, thereby providing strong support for making wise and rational investment decisions.



## Information Disclosure

The Company strictly abides by various regulatory regulations, adheres to fair, just, and open information disclosure standards, truthfully, accurately, completely, and timely discloses financial, operational, and governance information to stakeholders, and fulfills the disclosure responsibilities of listed companies, to safeguard the right to know of all stakeholders.

In 2024, the Company lawfully and compliantly disclosed more than 50 interim announcements and 4 periodic reports, covering performance forecasts, related-party transactions, use and management of raised funds, and other types of disclosures, thereby effectively fulfilling its information disclosure obligations as a listed company. By combining various forms such as text, charts, and images, investors can timely understand the Company's operating situation and investment value. In terms of information disclosure, full attention is paid to the readability of investors, reducing the difficulty of interpretation for investors. Annual environmental, social, and governance (ESG) reports and periodic reports in English are also disclosed, and communication with overseas investors is continuously valued. The Company strictly abides by various regulatory regulations of listed companies, strengthens its main responsibilities, continuously strengthens information disclosure management, achieves "zero errors" throughout the year, and has won the highest level of A-level information disclosure assessment by the Shanghai Stock Exchange for two consecutive years.





# Outlook

Minmetals New Energy will adhere to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implement the spirit of the 20th National Congress of the Communist Party of China and the Second and Third Plenary Sessions of the 20th CPC Central Committee, conscientiously implement the decisions and arrangements of the CPC Central Committee and the State Council and the work requirements of the Group, adhere to the general working tone of seeking progress while maintaining stability, fully, accurately and comprehensively implement the new development concept, thoroughly implement the requirements of the inspection and rectification of the central government and the party committee of the Group and the responsible audit, and focus on stabilizing growth, grasping innovation, strengthening industry, promoting reform, preventing risks, ensuring safety, and strengthening party building.

In the new year, the Company will pursue steady progress with targeted breakthroughs to fully accomplish all annual business objectives; focus on core operations while driving growth at both ends, accelerating the formation of a complete industrial chain closed-loop ecosystem; strengthen advantages and address weaknesses through enhanced incentives, boosting the supportive and leading role of technological innovation. scientifically benchmark and innovate mechanisms to comprehensively deepen reforms and promote quality and efficiency improvement; adhere to the bottom line, ensure safety, and continuously and effectively prevent and resolve risks in key areas; and practice the "20-Character" standard for leaders of state-owned enterprises and take responsibility in practical work.

The Company will steadfastly promote high-quality development to ensure the successful conclusion of the 14th Five-Year Plan and the smooth start of the 15th Five-Year Plan, contributing to social development and progress!





Appendix 1: Key Performance Indicators

Environment				
Indicator	Unit	2024	2023	2022
Water Utilization				
Total water consumption	10,000 metric tons	122.78	128.78	150.87
Fresh water consumption	10,000 metric tons	82.46	94.49	101.99
Total recycled water consumption	10,000 metric tons	40.32	34.29	48.88
Percentage of total recycled water consumption	%	32.84	26.63	/
Water consumption per million RMB 1,000,000 revenue	metric ton / million RMB revenue	221.66	120.03	/
Energy Utilization				
Total energy consumption	10,000 TCE	8.49	7.91	8.35
Direct energy consumption	10,000 TCE	0.95	/	/
Proportion of direct energy consumption	%	11.19	/	/
Fossil energy consumption	10,000 TCE	0.95	/	/
Gasoline consumption	Liter	1,297.30	959.46	/
Natural gas consumption	10,000 TCE	0.95	0.39	0.10
Non-fossil energy consumption	10,000 TCE	0.04	/	/
Clean energy consumption	10,000 TCE	0.95	/	/
Proportion of clean energy consumption	%	11.19	/	/
Indirect energy consumption	10,000 TCE	7.55	/	/
Outsourced electric power	10,000 TCE	6.72	6.74	7.16
Outsourced heating powersteam	10,000 TCE	0.83	0.78	1.09
Energy consumption per million RMB 1,000,000 revenue	TCE /million RMB revenue	15.33	7.37	/

Environment				
Indicator	Unit	2024	2023	2022
Environmental Compliance Management				
Total investment in environmental protection	RMB 10,000	5,369.98	4,139.78	/
Proportion of total investment in environmental protection to operating revenue	%	0.97	0.39	/
Amount of significant administrative penalties imposed by environmental authorities due to environmental incidents during the reporting period	RMB 10,000	0.00	/	/
Pollutant Emission				
Discharge of wastewater	10,000 metric tons	0.00	0.00	2.53
Discharge of industrial wastewater	10,000 metric tons	0.00	0.00	2.53
Ammonia nitrogen emissionsnitrogen	Pollutant equivalent / Total discharges (metric ton)	0.00	0.00	0.07
COD	Pollutant equivalent / Total discharges (metric ton)	0.00	0.00	1.61
Exhaust gas pollutant emissions (ammonia gas)	metric ton	0.48	0.69	0.73
Chemical oxygen demand (CODExhaust pollutant emissions (sulfuric acid mist)	metric ton	0.37	0.06	0.59
Exhaust gas pollutant emissions (PM)	metric ton	2.08	1.54	1.42
Nitrogen oxide emissions	metric ton	4.62	/	/
Sulfur oxide (SOx) emissions	metric ton	1.28	/	/
Waste Disposal				
Total solid waste disposed	metric ton	1,970.94	/	275
General Volume of general industrial solid waste generated	metric ton	1,607.60	/	/
Hazardous waste	metric ton	363.34	/	/
Volume of hazardous waste disposal	metric ton	363.34	/	400
Total recycled and reused wastehazardous waste generated per RMB 1,000,000 revenue	metric ton / RMB 1,000,000 revenue	0.066	/	/
Total non-hazardous waste generated per million RMB 1,000,000 revenue	metric ton / RMB 1,000,000 revenue	0.29	/	/



Minmetals New Energy Materials (Hunan) Co., Ltd.		2024 Environmental, Social and Governance (ESG) Report			Environmental Section: Harmony with Nature, Empowerment through Ecology	Community Section: Spreading Genuine Compassion, Protecting Deeds of Kindness	Governance Section: Multi-stakeholder Co-governance for Collaborative Development		
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Environment				
Indicator	Unit	2024	2023	2022
GHG Emissions Management				
Total GHG emissions	10,000 tCO2e	34.07	33.08	35.46
Scope 1 greenhouse gas (GHG) emissions	10,000 tCO2e	2.67	1.71	1.28
Natural gas	10,000 tCO2e	1.54	0.64	0.14
Carbonate	10,000 tCO2e	1.13	1.07	1.13
Gasoline	tCO2e	2.92	2.16	2.62
Scope 2 greenhouse gas (GHG) emissions	10,000 tCO2e	31.40	31.36	34.19
Outsourced electric power	100 MWh	5.46	5.49	5.83
Outsourced heating power (steam)	10,000 GJ	24.22	22.92	32.25
Reduction of GHG emissions	tCO2e	11,648	/	/
Scope 1 emission reduction	tCO2e	4,359	/	/
Scope 2 emission reduction	tCO2e	7,289	/	/
Direct (Scope 1) GHG emissions per million RMB 1,000,000 revenue	tCO2e / RMB 1,000,000 revenue	4.82	1.59	/
Indirect (Scope 2) GHG emissions per million RMB 1,000,000 revenue	tCO2e / RMB 1,000,000 revenue	56.69	29.23	/
GHG emission intensity per million RMB 1,000,000 revenue	tCO2e / RMB 1,000,000 revenue	61.51	30.83	/

Social				
Indicator	Unit	2024	2023	2022
Employee Recruitment and Employment				
Total number of in-service employees	person	2,064	2,330	2,053
Ethnic minority employeesminorities	person	111	148	/
Proportion of ethnic minority employees	%	5.38	6.35	/
Employees with disabilities	person	5	/	/
Proportion of employees with disabilities	%	0.24	/	/
Demobilized military personnel employed	person	32	/	/
Proportion of demobilized military personnel employed	%	1.55	/	/
By type of employment				
Full-time employees	person	2,064	2,330	2,053
By gender				
Male	person	1,576	1,810	/
Female	person	488	520	/
Female	%	23.64	22.32	23.14
By age				
30 and below	person	665	808	667
31-50	person	1,251	1,468	1,241
Over 50	person	148	124	145
By profession				
Production personnel	person	1,280	1,590	1,454
Sales personnel	person	19	20	18
Procurement personnel	person	18	/	/
Technical personnel	person	593	558	433
Financial personnel	person	20	23	19
Administrative personnel	person	134	139	129

Minmetals New Energy Materials (Hunan) Co., Ltd.		2024 Environmental, Social and Governance (ESG) Report			Environmental Section: Harmony with Nature, Empowerment through Ecology	Community Section: Spreading Genuine Compassion, Protecting Deeds of Kindness	Governance Section: Multi-stakeholder Co-governance for Collaborative Development
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Social				
Indicator	Unit	2024	2023	2022
By degree of education				
Ph.D.	person	12	14	
Master’ s degree	person	228	207	/
Bachelor’ s degree or below	person	1,824	2,109	/
By geographical region				
China (the Chinese mainland)	person	2,064	2,330	2,053
Employee Remuneration and Benefits				
Social insurance coverage	%	100	100	/
Average paid leave per employee	day	5	5	/
Employee satisfaction rate	%	98	97.29	/
Average salary per employee	RMB 10,000	11.3	15.05	/
Average revenue generated per employee	RMB 10,000	252	460.47	/
Employee Development and Training				
Total investment in employee training	RMB 10,000	46.84	38.4	60.28
Number of training sessions held	time	1,068	1,320	1,254
Total length of training in the year	hour	104,351	58,282	223,874
Average length of training hours per employee	hour	50.56	25.01	109.05
Coverage of employee training	%	100	100	100
Employee Care and Assistance				
investment in employee assistance	RMB 10,000	18,000	/	/
Number of employees in difficulty who received assistance	person	9	/	/
Innovation and R&D				
R&D investment	RMB 100 million	2.32	3.77	/
Proportion of R&D investment	%	4.18	3.51	/
Number of R&D personnel	person	301	282	/
Proportion of R&D personnel	%	14.58	12.10	/

Social				
Indicator	Unit	2024	2023	2022
Total number of valid patents	—	162	141	/
Number of valid patents per million RMB 1,000,000 revenue	—	0.029	0.023	/
Number of software copyrights registered	—	3	3	/
Number of software copyrights registered per RMB 1,000,000 revenue	—	0.00054	0.00028	/
Health and Safety				
Number of enterprises meeting certified for workplace safety standardization requirements	—	1	/	/
Workplace safety investment	RMB 10,000	732.7	533.4	/
Proportion of workplace safety investment to revenue	%	0.08	0.05	/
Length of workplace safety training	hour	58,000	53,600	/
Average safety training hours per employee	hour	28	23	/
Number of workplace safety training	time	183	161	/
Attendances for workplace safety training	attendance	16,295	13,930	/
Coverage of workplace safety training	%	100	100	/
Investment in occupational injury insurance for employees	RMB 10,000	81.47	/	/
Coverage of occupational injury insurance for employees	%	100	/	/
Occupational illness incidence rate	%	0	/	/
Number of workplace safety incidents	case	0	0	/
Social Welfare				
Community welfare investment	RMB 10,000	2.8	3.40	/
Community investment per million in revenue	RMB 10,000	0.00051	0.00032	/
Number of local employees hired	person	1,851	2,330	/
Proportion of local employees hired	%	89.6	100	/



Minmetals New Energy Materials (Hunan) Co., Ltd.

2024 Environmental, Social and Governance (ESG) Report

Environmental Section:  
Harmony with Nature,  
Empowerment through Ecology

Community Section:  
Spreading Genuine Compassion,  
Protecting Deeds of Kindness

Governance Section:  
Multi-stakeholder Co-governance for  
Collaborative Development

Governance				
Indicator	Unit	2024	2023	2022
Corporate Governance				
Number of Shareholders’ General MeetingsMeetings of Shareholders	time	5	3	5
Number of meetings of the Board of Directors	time	11	9	10
Number of Audit Committee meetings	time	5	5	/
Number of Remuneration Nomination Committee meetings	time	2	/	/
Number of Nomination Committee meetingsmeetings of the Strategy Committee	time	2	/	/
Proportion of independent directors in the Audit Committee	%	66.67	66.67	/
Proportion of independent directors in the Remuneration Committee	%	66.67	66.67	/
Proportion of independent directors in the Nomination Committee	%	66.67	66.67	/
Number of meetings of the Board of Supervisors	time	5	7	10
Attendance rate of BoD members	%	100.00	100.00	/
Average tenure of board members	year	3	3	/
Is the CEO also serving as Chairman of the Board	/	No	/	/
Proportion of independent directors	%	37.5	33.33	/
Age standard deviation of directors, supervisors, and senior management	age	6.97	8.35	/
Percentage of female directors	%	12.50	0.00	/
Proportion of independent directors serving more than 6 years	%	0	0.00	/
Percentage of independent directors holding positions in over 3 listed firms	%	0	0.00	/
Whether the convener of the audit committee is an accounting professional	/	Yes	/	/

Governance				
Indicator	Unit	2024	2023	2022
Regulatory Compliance in Business Practices				
Number of compliance training	time	13	12	8
Length of compliance training	hour	27.5	20	10
Attendances for compliance training	—	500	488	280
Anti-corruption training	time	48	45	42
Length of anti-corruption trainingtraining	hour	62	60	55
Number of participants receiving anti-corruption training	—	2,000	1,593	1,398
Number of articles and cases related to anti-corruption themes pushed	time	23	17	12
Investor Relation and Management of Shareholders’ Rights				
Performance presentation	time	4	4	/

Appendix II: Index List

Chapter Titles		Central Enterprise ESG Index <sup>1</sup>	Stock Exchange Index <sup>2</sup>
About this Report		G5.1; G5.2	Article 1, Article 2, Article 2, Article 4, Article 6, Article 7, Article 8, Article 10, Article 19
Message from Chairman		/	Article 2
About Us		/	Article 12
ESG Management		G5.1; G5.2	Article 2, Article 2, Article 8, Article 11, Article 13, Article 14, Article 15, Article 16, Article 17, Article 18, Article 19, Article 51, Article 52
Communication with Stakeholders		G3.1; G3.2; G3.3; G4.1;G4.2	Article 9, Article 53
Material Issues		/	Article 5, Article 7, Article 10
Environmental Section: Harmony with Nature, Empowerment through Ecology	Optimizing Resource Management	E.1.1; E.1.2; E.1.3; E.1.4; E.5.1; E.5.2; E.5.3; E.5.4	Article 34, Article 35, Article 36, Article 37
	Practicing the Thought on Ecological Civilization	E.2.1; E.2.2; E.2.3; E.4.1	Article 29, Article 30, Article 31, Article 32, Article 33
	Combating Climate Change	E.3.1; E.3.2; E.3.4; E.5.6	Article 20, Article 21, Article 22, Article 23, Article 24, Article 25, Article 26, Article 27, Article 28

Chapter Titles		Central Enterprise ESG Index <sup>1</sup>	Stock Exchange Index <sup>2</sup>
Community Section: Spreading Genuine Compassion, Protecting Deeds of Kindness	Building a Happy Workplace	S1.1; S1.2; S1.3; S1.4	Article 49, Article 50
	Protection of Customers’ Rights and Interests	S2.1; S2.2	Article 44, Article 47, Article 48
	Refining and Advancing R&D and Innovation	S2.3	Article 41, Article 42, Article 43
	Collaborative Value Chain Management	S3.1; S3.2	Article 44, Article 45
	Public Welfare Benefits Society	S4.2; S4.3; S4.4	Article 38, Article 39, Article 40
Governance Section: Multi-stakeholder Co-governance for Collaborative Development	Adhering to Party Building and Guide	G1.1	Article 51
	Optimizing Corporate Governance	G1.1; G1.2; G1.3	Article 51
	Lawful and Compliant Management and Control	S4.1; G2.1; G5.1; G5.2	Article 52
	Observing Business Ethics	G2.2; G2.3	Article 54, Article 55, Article 56
	Working Hand in Hand for Shared Success	G3.1; G3.2; G3.3; G4.1; G4.2	Article 9, Article 53

<sup>1</sup>Note 1: The “Central Enterprise ESG Index” refers to the Reference Indicator System for ESG Reports of Listed Companies Controlled by Central Enterprises.

<sup>2</sup>Note 2: The “Stock Exchange Index” refers to the Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies—Sustainability Report (Trial)



# Feedback Form

Dear readers:

Hello! Thank you for reading the Environmental, Social, and Governance (ESG) Report of Minmetals New Energy Materials (Hunan) Co., Ltd. To improve the quality and standard of the report, we sincerely hope to receive your valuable comments and suggestions on the report. Look forward to your reply!

Selective question (please mark ✓ in the corresponding position)

Please evaluate the degree of influence to the economy, society and environment by Minmetals New Energy Materials (Hunan) Co., Ltd. in the report:

☐ Excellent

☐ Good

☐ General

☐ Poor

☐ Very poor

Please evaluate the response and disclosure on problems that stakeholders concern in the report:

☐ Excellent

☐ Good

☐ General

☐ Poor

☐ Very poor

Please evaluate the clarity, accuracy and integrity of the information, indicators and data disclosed in the report:

☐ Excellent

☐ Good

☐ General

☐ Poor

☐ Very poor

Please evaluate the readability of the content in the report:

☐ Excellent

☐ Good

☐ General

☐ Poor

☐ Very poor

Please comprehensively evaluate the report:

☐ Excellent

☐ Good

☐ General

☐ Poor

☐ Very poor

Open questions

Do you think which aspect in the report is satisfying the most:

Do you think what information that you hope to further understand needs to be disclosed in the report?

Do you have any comments and suggestions on ESG work of Minmetals New Energy Materials (Hunan) Co., Ltd.?

We sincerely welcome you to provide your personal information

Name: \_\_\_\_\_

Tel.: \_\_\_\_\_

Occupation: \_\_\_\_\_

Email: \_\_\_\_\_

Organization: \_\_\_\_\_

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