

To pursue green, low-carbon and sustainable development

To be an environmentally and socially friendly enterprise

Appreciation Hard-working Concentration Innovation

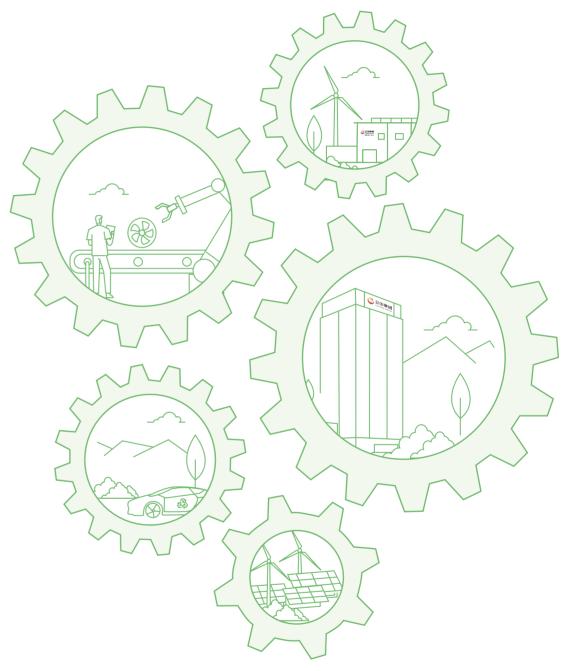
Released by Lizhong Sitong Light Alloys Group Co., Ltd.



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2025

Environmental, Social and Governance (ESG) Report

Cooperate More
Strive More



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Feedback Form

Response to Climate Change

Chairman's Message





In an era presenting numerous challenges and opportunities, Lizhong Group has persistently promoted the Environmental, Social and Governance (ESG) practices over the past year. We are committed to achieving the optimal balance among the uncertainties of the international situation, the escalating customer needs and the Group's development.



In 2023, the world faces unprecedented challenges, including accelerating climate change, resource scarcity, volatility in global trade, and geopolitical tensions. These challenges present both difficulties and opportunities to Lizhong Group. The Group strives to minimize its impact on the environment by strengthening environmental protection measures, such as adopting cleaner energy sources, reducing waste emissions and improving production efficiency. In terms of supply chain management, we have stepped up assessments of suppliers' environmental and social responsibilities to ensure that our business partners also follow the principles of sustainable development. Through these measures, we have not only improved the adaptability and resilience of our business but also made contributions to global sustainable development. 100,000 tons of CO₂e were reduced for Scope 1 and Scope 2 in 2023.

Nowadays, customers are increasingly prioritizing sustainable development, and we understand that meeting and even exceeding our customers' expectations is the key to our success. Therefore, we conduct technological innovation and service optimization to ensure that our products and services not only excel in terms of performance but also set a benchmark in terms of environmental protection and social responsibility. Adhering to the concept of "technology first", we work hard to tackle scientific research problems and have made breakthroughs in the recycling of aluminum scrap and R&D of recycled aluminum. When it comes to factory digitalization Lizhong Group completed the renovation of its 5G+ smart industrial park and built a 5G cloud-based smart demonstration factory in 2023. By means of questionnaires and active market communication, we help our customers know about our efforts in carbon reduction and better understand their needs through diversified interaction and feedback mechanisms.

We always believe that long-term success can only be secured if sustainable development is deeply incorporated into our corporate culture and strategy. In the past year, we strengthened the corporate governance structure to ensure transparency and fairness in the decision-making process. We continued to optimize greenhouse gas accounting and enhance carbon emission management. In addition, we increased the investment in employee training and development so that each of our employees can play a role in promoting sustainable development. A variety of public benefit activities have also been conducted to promote the construction of harmonious communities and fulfill corporate social responsibilities.

In the future, Lizhong Group will unswervingly carry forward the sustainable development strategy and explore a more efficient, environmentally friendly and fairer development path. We will promote lean production, green and low-carbon production, and digital and intelligent transformation to achieve green, low-carbon and sustainable development. Besides, we will further evaluate the relationship between our development and the environment, governance, and social responsibilities, identify existing environmental, social and governance issues and risks, to achieve sustainable development.

Zang Yongxing Chairman

About Lizhong Group

Founded in 1984, Lizhong Sitong Light Alloys Group Co., Ltd. was listed on the GEM board of the Shenzhen Stock Exchange in 2015 (stock code: 300428). The listed company operates its business mainly in four sectors: Lizhong Alloy, Lizhong Wheel, Sitong New Metal Material and Lizhong New Energy. We are an international group that focuses on R&D and manufacturing of recycled cast aluminum alloys, wrought aluminum alloys, aluminum alloy wheels, auto aluminum alloy parts, functional intermediate alloy new material, precision molds, auto-melting equipment, and new lithium/sodium ion battery materials. In 2023, the listed company has 9 production bases around the world, with more than 12,000 employees and operating income of RMB 23.36 billion.

Corporate value

and producing excellent products, to meet the market demands and achieve the common prosperity of employees, customers and shareholders

Enterprise spirit

Strive more and

Group business policy

Operate honestly to be a respected century-old enterprise Implement intelligent management and advanced technology to create value Pursue steady development and pragmatic progress to achieve the common prosperity of employees, customers and shareholders





























Products of Lizhong New Energy







Competitive Advantages Across the Entire Industrial Chain



Lizhong Alloy

A leading manufacturer of low-carbon aluminum alloys and new materials. With nearly 40 years of experience in recycling, processing and producing recycled aluminum, as well as direct delivery technology of aluminum alloy liquid within a radius of 60 km, the company provides strong technical support for green and low-carbon manufacturing of aluminum alloy users.



Sitong New Metal Material

The company has a series of products including aluminum-based functional intermediate alloys, special intermediate alloys of aerospace grade, fluxes, and additives, with more than 360 kinds of products.



Lizhong Wheel

The company has five production technologies, namely low-pressure casting, casting spinning, solid forging, liquid die forging and counterpressure casting. The products have the advantage of being ultra-lightweight, with more than 2,000 specifications and models from more than 400 varieties, ensuring the market competitiveness of Lizhong Wheel.

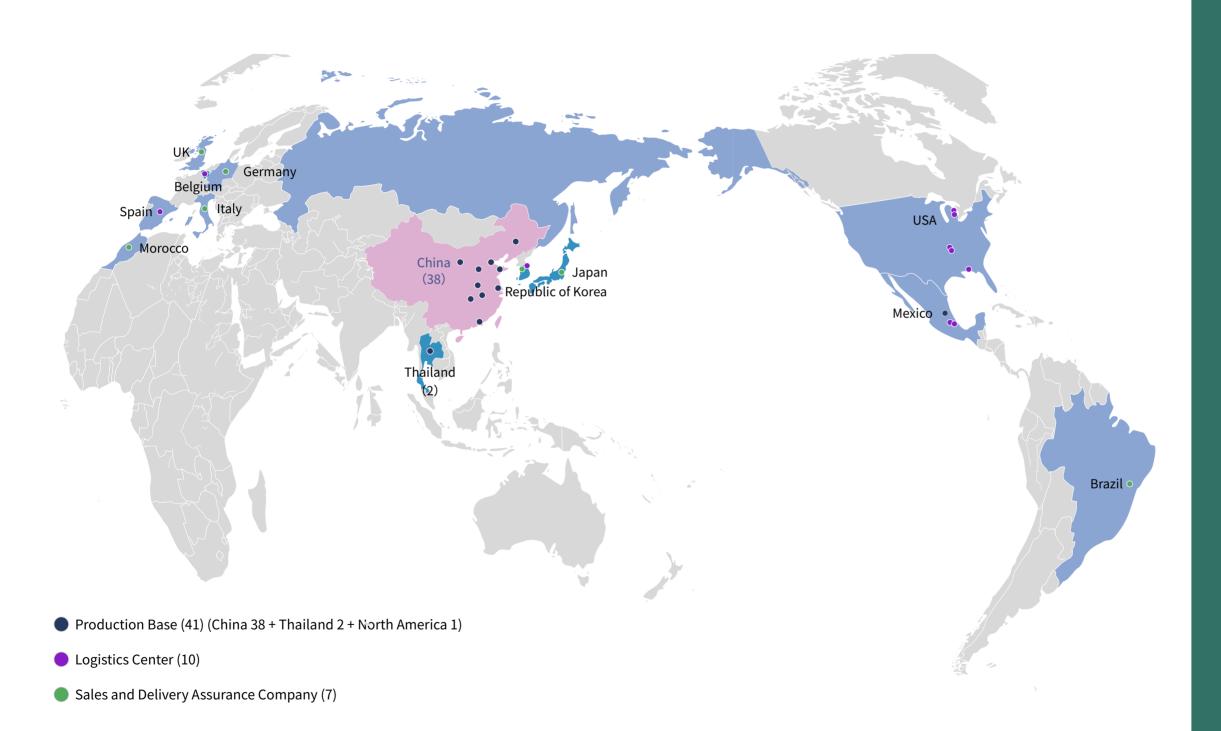


Lizhong New Energy

The company's main products include new energy lithium batteries, new materials for sodium batteries and fluoride salt series products, among which potassium fluorozirconate, potassium fluorotitanate and potassium fluoroborate are the key raw materials for the production of functional intermediate alloys by Sitong New Metal Material.



Industrial Layout



As a globalized enterprise, Lizhong Group has advanced production bases and business networks in 20 provinces and cities in China, which ensure extensive coverage and efficient market response of products and services. The Group actively expands into the international market and currently has established business organizations in 12 countries and regions, including the US, the UK, Thailand, Mexico, Brazil, and the Republic of Korea, forming a solid global business layout. The global workforce of about 12,000 employees provides the momentum for the Group's continuous development and competitiveness enhancement in both domestic and overseas markets.

Overseas industrial layout					
USA	Thailand	Republic of Korea			
UK	Japan	Brazil			
Germany	Mexico	Italy			
Morocco	Spain	Belgium			

Domestic industrial layout

	Tianjin	Guangzhou
	Chongqing	Baoding, Hebei
I	Binzhou, Shandong	Jining, Shandong
I	Qingyuan, Guangdong	Yangzhong, Jiangs
ı	Lu'an, Anhui	Daye, Hubei
	Changsha, Hunan	Changchun, Jilin
	Baotou, Inner Mongolia	Qinhuangdao, Heb
	Shanghai	Yantai, Shandong
	Yangzhou, Jiangsu	Yingde, Guangdon
	Wuhan, Hubei	Xuzhou, Jiangsu

Business performance of the Group in 2023





Net profit attributable to parent company (net of equity incentive amortization) (RMB 10,000)

ESG honors and awards

08



Honors and awards



Topic

Lizhong Group

-Road of "Recycling"-







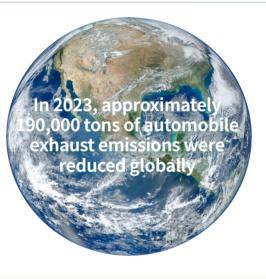
Lightweight







Compared with steel wheels, our aluminum alloy wheels reduce the weight of each vehicle by 30 kilograms.







Energy-saving and carbon-reducing



11

Compared with steel wheels, our aluminum alloy wheels save 0.18 liters of fuel per hundred kilometers.

Each ton of recycled aluminum

Saves 14,000 kilowatthours of electricity Reduces CO₂ and SO₂ emissions by 13 tons

Saves 22 cubic meters of water

Reduces mining extraction by 11 tons

Reduces solid waste emissions by 20 tons

In 2023, we

Saved 6.3 billion kilowatthours of electricity Reduced CO₂ and SO₂ emissions by 5 million tons

Saved 10 million cubic meters of water

Reduced mining extraction by 5 million tons

Reduced solid waste emissions by 9 million tons

Lizhong Group's Sustainability Management



Organizational structure

Lizhong Group has formally established an organizational structure for sustainable development and formulated the 2021-2030 Strategic Plan for Sustainable Development to ensure the systematic, comprehensive and efficient promotion of sustainable development.

The Board of Directors of Lizhong Group takes a comprehensive view of the general situation to make the strategic plan for sustainable development. The Sustainable Development Management Committee is established under the Board of Directors, responsible for managing the advancement of significant matters in sustainable development and the assessment of related performance and reporting to the Board of Directors on a regular basis. The subordinate Sustainable Development Division is responsible for overall coordination of specific tasks and matters related to sustainable development. An external expert group is engaged to provide guidance on the sustainable development of Lizhong Group. Each sector has a dedicated responsible person. All companies of the Group have set up a sustainable development promotion team headed by the general manager to comprehensively promote sustainable development.



Communication with Stakeholders and Identification of Material Issues

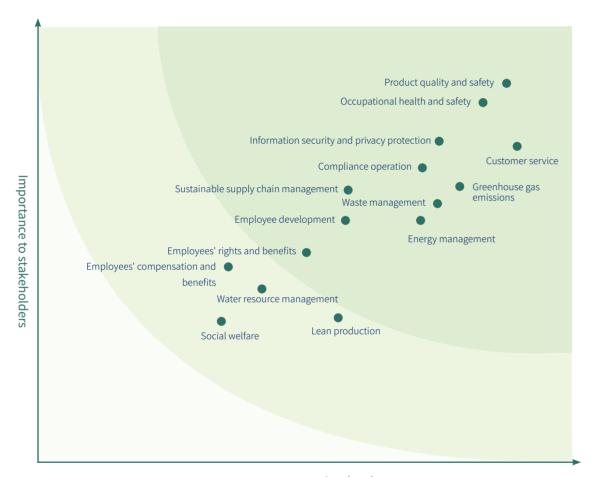
Communication with stakeholders

Communication with stakeholders is an important part of Lizhong Group's sustainable development management. Lizhong Group accurately identifies stakeholders, maintains communication with them through meetings, regular visits and satisfaction surveys to understand their expectations and interest demands for Lizhong Group, and takes measures to respond to and meet the reasonable demands of stakeholders based on its own production and operation situation.

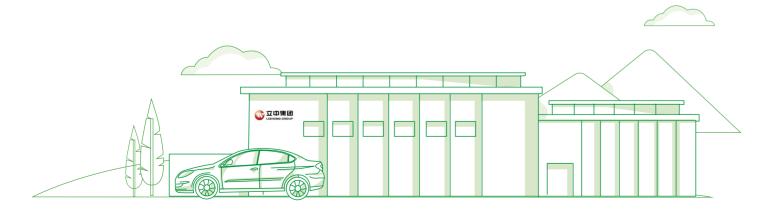
Sta	keholders	Major concerns	Response methods
	Shareholders and investors	 Sustainable profitability Regulation of corporate governance Disclosure of business information Return to shareholders 	 Improvement of business management Optimization of internal compliance management system Timely and accurate disclosure of information Organization of a general meeting of shareholders
000 CM	Customers	Integrity in performanceHigh-quality productsHigh-quality servicesResponse to demands	 Strict implementation of contract content Strengthening product quality control Offering high-quality services Improving customer complaint handling processes Customer privacy protection
	Employees	 Legitimate rights and interests protection Salary and welfare guarantee Health and safety protection Building a development platform 	 Equal and standardized employment Offering competitive salary Providing a healthy and safe work environment Improving talent development channels
	Suppliers and other partners	Sunshine purchase Integrity in performance Win-win cooperation	Signing sunshine agreements with suppliersOpen and fair procurementSupporting supplier growth
	Communities	 Protecting local environment Supporting community development Charity	 Carrying out energy saving and emission reduction to protect ecological environment Supporting the development of community public utilities Carrying out community charity activities
	Government agencies	 Observing disciplines and obeying laws Paying taxes according to law Promoting local economic development 	 Observing the laws and regulations Paying taxes according to law Providing the opportunities of employment Driving the development of relative industries
	Financial institutions, media, etc.	Common development Information transparency	Conducting strategic cooperation Organizing visits, meetings, etc.

Identification of substantive issues

Based on the expectations, business scope and sustainable development of internal and external stakeholders, Lizhong Group conducts identification, evaluation and analysis of substantive issues to establish substantive issues that are important to the Group and stakeholders in order to better respond to the demands and expectations of stakeholders in the report. In 2023, Lizhong Group distributed a questionnaire on substantive issues of sustainable development reports to stakeholders, extensively collecting suggestions from investors, customers, employees, suppliers and others on the Group's sustainable development issues.



Importance to enterprise development



Lizhong Group contributing to global sustainable development goals

Lizhong Group responds to the requirements of Sustainable Development Goal under Transforming our World: The 2030 Agenda for Sustainable Development passed on the 70th Session of The United Nations General Assembly. This Agenda announced 17 sustainable development goals, which aims to solve issues in 3 aspects, including economic, social and environmental issues, and achieve global sustainable development. Based on our business, Lizhong Group actively responds to 13 sustainable development goals involved, continuously improves internal sustainability management, improves the Group's social influence, and promotes the sustainable development of the industry and the whole society.



















	Our actions	Chapter
3	Make sure that the coverage of occupational health examination and the completion rate of safety training for employees are both 100%.	Harmonious Workplace Creating a Sense of Belonging
4	Set up the "Knowledge Academy" and establish a three-tier training system.	Harmonious Workplace Creating a Sense of Belonging
5	Insist on equal pay for equal work between men and women to promote gender equality.	Harmonious Workplace Creating a Sense of Belonging
6	Use water-saving equipment to maximize the reuse of water resources.	Prioritizing Digital Intelligence for Lean and Low-carbon Development
7	Prioritize the use of photovoltaic and other clean energy to reduce greenhouse gas emissions, with an overall capacity plan of 29.29 MW for photovoltaic projects.	Prioritizing Digital Intelligence for Lean and Low-carbon Development
8	Create a career development path for management, technology and skills respectively.	Harmonious Workplace Creating a Sense of Belonging
9	Continuously increase investment in scientific research and introduce leading testing and inspection equipment and talents at home and abroad. Cooperate with domestic famous universities and research institutions.	Prioritizing Digital Intelligence for Lean and Low-carbon Development
10	Advocate employee diversity.	Harmonious Workplace Creating a Sense of Belonging
1	Actively participate in social donations and public welfare activities.	Harmonious Workplace Creating a Sense of Belonging
12	Ensure a sustainable production model.	Prioritizing Digital Intelligence for Lean and Low-carbon Development
13	Carry out carbon inventory and carbon footprint accounting, and make energy-saving and carbon reduction planning to effectively reduce greenhouse gas emissions.	Compliance Operation Green and Sustainable Development
16	Establish a Sustainable Development Management Committee to enhance sustainable development efforts.	Lizhong Group's Sustainability Management
17	Establish close partnerships with domestic universities and research institutes, with an aim to promote the sustainable development of the industry.	Prioritizing Digital Intelligence for Lean and Low-carbon Development

Efficient Governance, Stable Operations

Lizhong Group is committed to improving the corporate governance system to achieve a higher level of corporate governance. The Group has established a set of scientific and efficient decision-making system as well as a set of monitoring mechanism featuring mutual constraints, fairness and balance, which have contributed to the healthy development and stable operation of the Group.



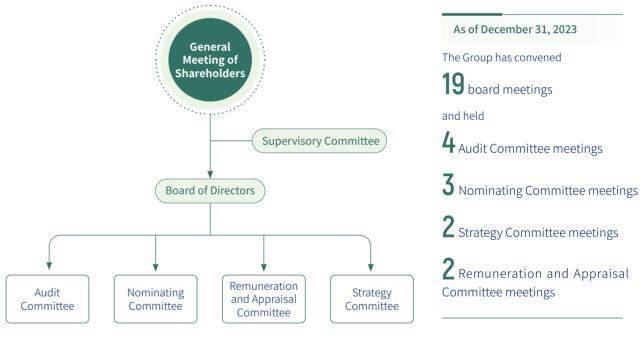


Improving Corporate Governance

Strengthening the cornerstones of governance

Lizhong Group strictly follows the requirements of laws, regulations, and relevant normative documents such as the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Code of Corporate Governance for Listed Companies, and the Articles of Association to ensure the healthy and orderly operation of various production and business activities, and lay an important foundation for achieving sustainable development. The Group has established a general meeting of shareholders, a Board of Directors and a Supervisory Committee. The Board of Directors is responsible for reviewing important matters related to the development of the company. The Group has taken multiple measures to diversify its board members, including professional experience, skills, knowledge, services, term of office, region, culture, educational and age, to ensure professionalism and rationality. The Board of Directors promotes the diligence and responsibility of the board members and safeguards the interests of the Group, shareholders and other stakeholders through a well-established system and working mechanism. During the reporting period, the Board of Directors comprised a total of 7 directors (including 3 independent directors). In the future, the Group will consider adding foreign and female independent directors to enhance the diversity of the Board of Directors. The Company has one female supervisor at present.

The Board of Directors has four special committees, namely the Strategy Committee, Audit Committee, Nominating Committee, and Remuneration and Appraisal Committee. The special committees study the professional matters and put forward opinions and suggestions for the reference of the Board of Directors in making decisions. The members of each special committee are held by the Group's directors.





Deepening Investor Communication and Information Disclosure

Investor relations management

Lizhong Group attaches great importance to the protection of investors' rights and interests. In order to further strengthen information communication between the Group and investors and potential investors, deepen investors' understanding and recognition of the Group, and enhance the investment value, the Group has formulated the Investor Relationship Management System of Lizhong Sitong Light Alloys Group Co., Ltd. to clarify the work content and responsibilities of investor relationship management and establish long-term, stable and benign cooperation with investors.

In 2023, the Group conducted online performance exchanges, on-site surveys, and roadshows, and answered questions from the online interaction platform (https://irm.cninfo.com.cn/), which enabled investors to further understand the Group's operating situation and future development plans. In 2023, the Group held a total of 4 performance briefing sessions, with high participation from institutional investors.



In order to standardize information disclosure, Lizhong Group has formulated the Information Disclosure Management System. Following the principles of justice, equity and publicity, the Group improves the information disclosure system, discloses the information timely, accurately and completely, and performs the decision-making procedures in strict accordance with the listing rules and regulations to protect the rights and interests of investors. The Group presents the corporate operation and management information to investors objectively, truthfully, accurately and completely, maintains good communication with investors, and strives to create good business performance to repay investors.

Securing Stable and Compliant Operation and Risk Management

Compliance management

Lizhong Group abides by the business philosophy of integrity, effectively fulfills its obligations as a listed company, constantly improves the internal control system, and ensures that the production and operation activities meet the requirements of national laws and regulations and listed company regulators. The Group has established compliance management systems such as compliance training and compliance inspection, timely revised and improved existing systems in accordance with regulatory policies, and prepared and issued relevant system documents such as the Safety Management System, Procurement Management System, and Provisions on Trade Secret Protection. Multiple measures have been taken to enhance the awareness and capability of compliance management across the Group and provide support for sustainable and healthy development.

Risk management

The Group attaches great importance to the construction and supervision of internal control and risk management system. The Group receives regular reports on internal control, evaluates major risks, determines prevention and control measures and response plans, and ensures the improvement and effective operation of the internal control system. Lizhong Group has formulated the Internal Control System in accordance with laws and regulations such as the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, and the Shenzhen Stock Exchange Guidelines No. 2 on Self-regulation of Listed Companies - Standard Operation of GEM Listed Companies. The Group adheres to the seven principles of legality, comprehensiveness, materiality, effectiveness, checks and balances, adaptability and cost effectiveness to continuously strengthen the construction of the internal control system and enhance the ability to prevent and resolve major risks.



Investor exchange activity

As of December 31, 2023

The Group released

161 regular reports and provisional announcements During the reporting period, the Group was rated

A by the Shenzhen Stock Exchange for information disclosure

Strengthening Business Ethics

The Group has established and improved anti-corruption procedures and continuously optimized anti-corruption work. Corresponding systems have been established to regulate the operation of risk areas and key links that are prone to corruption in the process of operation and management. The Group improves management systems for key links such as marketing, procurement and quality to prevent internal and external corruption risks; emphasizes clauses such as avoidance of employee conflicts of interest, and actively carries out declaration and inspection of employees' relationships with suppliers, partners and other important stakeholders.

Strictly abiding by the Law of the People's Republic of China Against Unfair Competition, the Anti-Monopoly Law of the People's Republic of China and other laws and regulations, the Group adheres to fair competition, opposes any form of commercial bribery, monopolization and unfair competition, and strictly requires all employees to adhere to the business ethics. By carrying out training activities on anti-monopoly and fair competition, we continue to enhance the awareness of business ethics among employees. During the reporting period, we had no violation incidents involving improper competition behavior and violation of anti-monopoly laws.

We establish a Supervisory Committee and an Audit and Supervisory Committee that are responsible for the anti-corruption work. We also formulate the Regulations on Supplier Selection and Business Cooperation with Suppliers and the Regulations on Internal Personnel Making Contact with Suppliers. Putting emphasis on the training and signing of the Sunshine Agreement, we require the business departments to send the Sunshine Cooperation Letter to Suppliers to our suppliers and the business personnel to learn the Sunshine Agreement. Furthermore, we are committed to establishing and using the e-tendering and procurement platform.

The Group disseminates anti-corruption management requirements, promotes a clean, honest and self-disciplined corporate culture, deepens employees' awareness of anti-corruption, promotes the Group's healthy development, and safeguards the Group's reputation and the legitimate rights and interests of shareholders through publicity and training.

The Group accepts reports of violations by telephone, email, etc. Employees, third parties who have dealings with the Group, and the public can report any fraud related to business and crime related to duties. The Group carefully investigates the content of the report and provides timely feedback on the handling results.



Case

To enhance the anti-corruption and integrity work, the Management Department issued a notice on organizing training for employees to learn the Sunshine Agreement again in June 2023. The training covered all functional, operational and technical employees, and a total of 1,382 employees attended the training. The total duration of the training was 2,073 hours.



Case

In December 2023, the Management Department of the Group issued the Notice on Strengthening Integrity Construction as Well as Self-Investigation and Self-Correction Work, requiring the management personnel to incorporate the integrity work into the annual duty report and publicizing that the employees establish complaint channels. Comprehensive measures have been taken to eliminate the internal corruption of Lizhong Group.



Training on business ethics

Reporting methods

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19030326789

Email:

zangliguo@lizhong.com.cn

Enhancing Information Security Protection

Information management

Lizhong Group places a high value on information security management and strictly complies with laws and regulations such as the Data Security Law of the People's Republic of China and the Personal Information Protection Law of the People's Republic of China. In accordance with ISO 27001:2022 and TISAX international standards, the Group has set up an information security team responsible for overall information security work. The team contains positions such as information security supervisor, executive team leader of information security, and information security engineer to strengthen information security management.

As of December 31, 2023

Lizhong Group had no incidents of data information leakage.

Data privacy

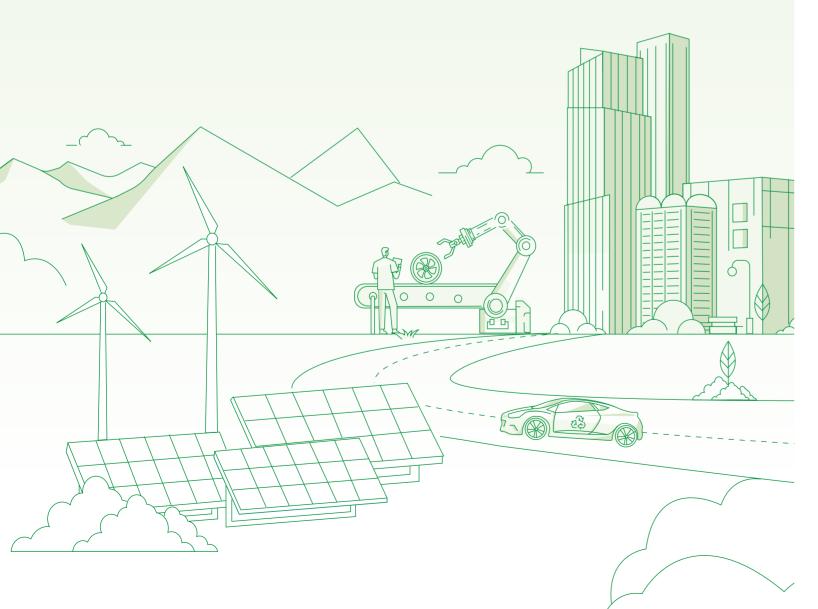
A database auditing system has been deployed to strengthen data security, enhance internal control and meet regulatory requirements. By monitoring database activities in real time, recording detailed logs and detecting abnormal operations, the system prevents the risk of data leakage and misuse and protects the data privacy of customers and partners. Besides, the system enhances internal control and compliance management. Through the management of database users' rights, only authorized users can access and modify data, reducing the risk of internal data misuse and unauthorized operations. In addition, the system records detailed logs of database activities, providing the basis for subsequent audits and investigations and facilitating analysis of the cause and impact of security incidents.



Prioritizing Digital Intelligence for Lean and Low-carbon **Development**

Lizhong Group actively promotes the digital and intelligent transformation of the company. We leverage advanced technologies to achieve intelligent business management and lean production, thereby enhancing operational efficiency. Additionally, in response to the call for low-carbon initiatives, we implement green strategies and adopt energy-saving measures, actively fulfilling our social responsibilities in an efficient, green, and sustainable manner.





Industrial Digital Transformation

Lean management

Lizhong Group carries out lean production, optimizes production processes, and improves the automation of production processes and equipment by improving the layout of production lines and upgrading existing production equipment, to reduce waste and to lay the foundation for the digital transformation of the company. Lizhong Group promotes 5S, standardization and refinement management, so that the backbone staff of the Group can enhance their professional ability of lean management and devote themselves to increasing production efficiency, improving product quality, enhancing delivery guarantee capability and continuously meeting customers' needs. Through lean management and by enhancing the quality and efficiency, as well as reducing costs, we boost the competitive edge of Lizhong Group products.

5G fully connected intelligent factory platform

The Lizhong Wheel Group's Qingyuan factory makes full use of the integration of newgeneration information and communication technologies represented by 5G, to build a 5G cloudbased intelligent demonstration factory.

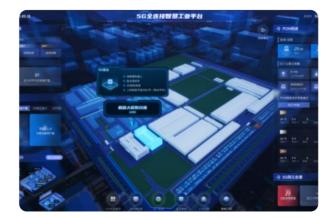
By adopting the cloud-based 5G customized products independently developed by the operator, and based on a unified lightweight cloud network base, UPF, MEC, and innovative cloud network applications are deployed to create Lizhong's proprietary industrial convergence platform that integrates computing and network resources. Being oriented to cost reduction, quality improvement, and efficiency increase and focusing on the wheel manufacturing process, the project involves 12 workshops and 8 processes. Based on the actual production scenarios, the project plans to implement seven 5G innovation applications for 4 major categories (manufacturing, testing and monitoring, warehousing and logistics, and operation and management). The applications include 5G + AI visual personnel management, 5G + intelligent mobile security monitoring, 5G + AR remote collaboration, 5G + AI robotic wheel sorting, 5G + AGV intelligent warehousing, 5G + digital intelligent park management, and visualized data cockpit. In this way, a 5G digital intelligent factory is built to empower the innovative change of production and manufacturing.

As the first implemented full-scene application of the 5G customized network in the auto parts manufacturing industry in the northern region, the project has achieved great social benefits. As a result, Lizhong Group won the first prize of Hebei Regional Competition (Thematic Competition) of the 6th "Blooming Cup" 5G Application Collection Contest and the Award of Excellence in National Finals sponsored by the Ministry of Industry and Information Technology, setting an example for the domestic industry.





Award of Excellence for 5G Application





5G intelligent platform

Breakthrough in Green Technology

Adhering to the technological innovation model based on "independence + cooperation" to pursue innovation driven development, Lizhong Group actively implements the development strategy of technological priority to plan for forward-looking, ground-breaking and green technological innovation projects. Guided by the market and customers' demands, Lizhong Group plans the development and innovation of recycled aluminum technology and products, continuously improves the scientific and technological innovation system, strengthens the basic management of innovation, and meets the external customers' demands. At the same time, Lizhong Group actively carries out technical exchanges with professional institutions and scholars in the industry sectors, leads the global development of recycled aluminum technology, and contributes to the promotion of green, low-carbon and sustainable development.



Application of high-gloss silver waterborne coating process for aluminum alloy wheels

The automobile manufacturing industry features a large scale, a high level of technology, a long industrial chain, wide coverage, and strong relativity, and it holds a strategic position in the national economy. Low consumption and emission reduction in the automobile manufacturing industry are key elements for promoting environmental protection. From the perspective of automobile coatings, waterborne paint with low VOC emission plays a huge role. To meet the personalized and low-emission technology development of highend wheels, Lizhong Wheel developed high-gloss silver waterborne paint and the infrared resonance fast drying process. By using infrared lamps instead of natural gas for drying, VOC emissions of the primer, color paint, and bright paint decrease from 70%-75%, 95%-98%, and 65-70% to 10%-15%, 3%-5%, and 15%-20%, respectively, which improves the green manufacturing level of aluminum alloy wheels. The application of waterborne coating technology for aluminum alloy wheels is of great significance to energy saving and carbon reduction. While reducing energy consumption, saving resources, and lowering carbon emissions for environment and health protection, the technology cuts production costs and improves product quality, which facilitates sustainable development and green manufacturing.



High-efficiency low-carbon heat treatment process for aluminum alloy wheels

To meet the requirements of low-carbon and energy-saving technology for high-end wheels, Lizhong Wheel developed a highefficiency low-carbon heat treatment process for aluminum alloy wheels on the basis of the T6 process. The existing process of "long solid solution duration + long aging at a low temperature" is optimized by shortening the solid solution and aging duration and increasing the aging temperature. With an increase in the production capacity of a single month by 9%-11%, electricity consumption is reduced by 10%-13% and natural gas consumption is reduced by 11-15%, which improves the green manufacturing technology level of aluminum alloy wheels. The application of new heat treatment technology for aluminum alloy wheels is of great significance to energy saving and carbon reduction. While reducing energy consumption, saving resources, and lowering carbon emissions for environment and health protection, the technology cuts production costs without lowering product quality, which facilitates sustainable development and green manufacturing.







Development of high-efficiency magnesium removal agent

Due to high economic benefits and environmental friendliness, recycled aluminum alloy has been increasingly applied with great potential for development. The high-efficiency magnesium removal agent, which was developed by Lizhong Sitong and applied in the recycling field of recycled aluminum, can remove the magnesium element in recycled aluminum alloy. The agent has the advantages of environmental protection, high magnesium removal efficiency and lower radiation value. It is in line with the requirements for green recycling of aluminum and promotes the recycling and reuse of recycled aluminum.

Harmless resource utilization of secondary

Hebei Sanyi Renewable Resources Utilization Co., Ltd. carries out in-depth research around resource regeneration and recycling and harmless resource utilization of aluminum ash slag and other directions related to the comprehensive utilization of secondary aluminum ash. At present, the company has a calcium aluminate production line with an annual treatment capacity of 80,000 tons of aluminum ash. The calcium aluminate products are mainly used as auxiliary raw materials of pre-melting refining slags for steelmaking. In addition, the company has the qualification of hazardous waste disposal, which provides technical support for addressing the challenges of aluminum ash stockpiling, disposal and utilization in the local area. The company drives the advancement in aluminum ash disposal and utilization by other companies of the Group and the surrounding processing enterprises. Furthermore, it sets an example for the efficient disposal and high-value utilization of aluminum ash hazardous waste in China.

Integrated die-casting helps the low-carbon development of new energy vehicles

Longda Aluminum (Shunping) Co., Ltd. and Baoding Longda Aluminum Co., Ltd. jointly undertook the 2023 Hebei Province major scientific and technological achievement transformation project "R&D and industrialization of heat-treatment-free aluminum alloy materials for super-large-scale integrated die-casting of new energy vehicles". This project will carry out the composition design and optimization of heat-treatmentfree aluminum alloy materials for large-scale integrated diecasting, the research on joint refinement and metamorphosis and multi-stage purification and melting process, the research on low-carbon and environmentally friendly heat-treatmentfree aluminum alloy material preparation technology, and the research on the application of heat-treatment-free aluminum alloy materials in integrated die-casting of new energy vehicles. In addition, the project will transform the existing production line as well as equipment and facilities to support an annual output of 15,000 tons of heat-treatment-free aluminum alloy materials for new energy vehicles. The implementation of this project will achieve energy savings of 80,000 tons of standard coal and 220,000 tons of emission reduction.



Discussing green development with BMW

Green Operation

Energy management

Lizhong Group is actively engaged in energy management, and all its major subsidiaries have obtained ISO 50001 energy management system certification. We have formulated the Management Process of Energy Consumption and Statistical Analysis, set targets related to energy management, and optimized the energy use structure to improve the energy management system.

In the context of global energy saving and carbon reduction, Lizhong Group actively practices national policies and responds to customer requirements. We continuously increase the use of clean energy by photovoltaic power generation and reduce the carbon emissions of products. By renovating high energy-consuming equipment, actively exploring new types of power-saving equipment, and continuously promoting the use of waste heat to save gas, we optimize the efficiency of energy use and achieve continuous energy saving.



Case

Construction of distributed photovoltaic projects

The Group makes an overall plan of photovoltaic projects totaling 29.29 MW, of which 22.99 MW will be connected to the grid in 2024-2025. The average annual power generation capacity is about 26.35 million kWh.

- The 1.6 MW photovoltaic solar carport project of Tianjin Lizhong Wheel Co., Ltd. was put into use in June 2023, with an average annual power generation capacity of about 1.69 million kWh.
- The 7.5 MW photovoltaic project of Xintai Wheel Manufacturing Co., Ltd. has an average annual power generation capacity of about 9.9 million kWh.
- Lizhong (Mexico) Co., Ltd. makes a plan for a 3.5 MW photovoltaic project with an average annual power generation capacity of about 4 million kWh.
- The 1.39 MW photovoltaic project of Tianjin New Lizhong

- Alloy Group Co., Ltd. has an average annual power generation capacity of about 1.4 million kWh.
- The 4 MW photovoltaic project of Lizhong Sitong Light Alloys Group Co., Ltd. has an average annual power generation capacity of about 4.4 million kWh.
- Baoding Lizhong Dong'an Light Alloy Parts Manufacturing Co., Ltd. makes a plan for a 10 MW photovoltaic project, the first phase of which is 3.7 MW, with an annual power generation capacity of about 3.66 million kWh.
- The 1.3 MW photovoltaic project of Guangdong Longda Lishan Light Metal Products Co., Ltd. has an annual power generation capacity of about 1.3 million kWh.





Case

Remodeling of high energy-consuming equipment

We actively explored power-saving measures. Under the premise of meeting process requirements, we adjusted the energy-consuming structure by changing the equipment structure. For example, we replaced the 15 kW hydraulic system with a gas-liquid booster cylinder in the helium testing machine. The remodeling of a single piece of equipment can save about 56,000 kWh of electricity per year.

Remodeling of inverters and high-efficiency equivalent motors:

We added inverters to some fans of the old production line and adjusted the fan power to reduce power consumption. We used higherficiency energy-saving pumps to replace high energy-consuming pumps. The energy is saved by 20% compared with the same period in 2022 and 2021, and an annual power saving of 0.9 million kWh is expected.

We replaced high energy-consuming transformers with S22 energy-saving transformers, which reduced transformer losses by about 40,000 kWh per year. We installed on-site compensation cabinets and improved the power factor, which reduced power consumption by 0.17 million kWh per year.

We actively explored new power-saving technologies and installed advanced power management equipment for thermal workshops, which saved power by 6%, with annual power savings of 0.34 million kWh. The accumulated electricity saving in 2023 is 1.506 million kWh.



Case

Continuously enhancing the utilization of conventional waste heat

We used regenerative burners for smelting furnaces to increase the heat accumulator and used waste heat of flue gas to dry and preheat aluminum skimmings. We saved 10 million m³ of natural gas throughout the year.

We added heat exchangers on the exhaust of preheating furnaces and preheated the combustion air, lowering the natural gas consumption by 0.147 million m^3 .

We utilized waste heat from air compressors. Combined with the compressed air station monitoring system, we recovered heat generated in the working process of the air compressor through the oil-water heat exchange. We used an intelligent electronic control system to utilize the hot water after heat exchange for production and life use, thus reducing energy consumption. Every year the wheel company saves about 8 million m³ of natural gas by

recycling waste heat from air compressors.

Low-temperature waste heat utilization project: After the utilization of high-temperature flue gas from industrial furnaces and air compressors, there still exists a large amount of low-temperature waste heat, such as process circulating water and equipment cooling water. As the water temperature requirements are stringent and the waste heat temperature is lower than the industrial furnace group, the utilization of low-temperature waste heat is a little complex. We adopted efficient low-temperature waste heat utilization technology (exchange unit) to absorb the process circulating water and equipment cooling water low-temperature heat. Then we converted the water for temperature regulation in the production and living environments. It is expected that 0.35 million m³ of natural gas will be saved and 628 tons of carbon dioxide emissions will be reduced.



the utilization of conventional waste heat

Water resources usage and management

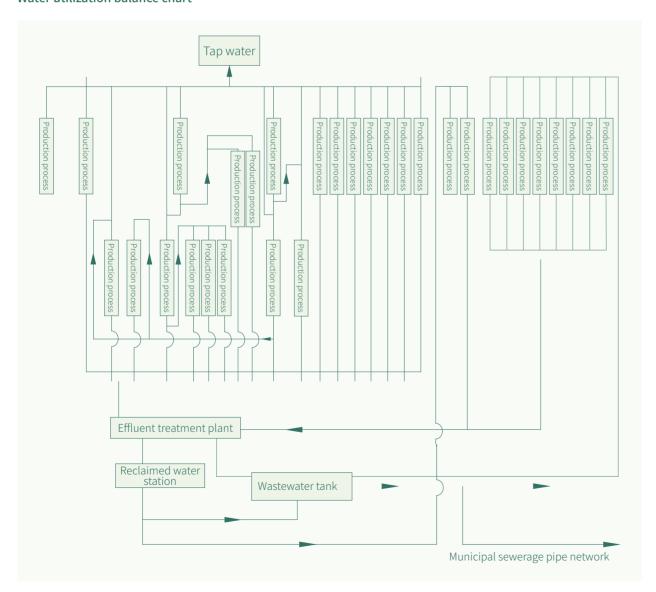
Lizhong Group attaches great importance to water resources protection and is committed to building a water-saving friendly enterprise. Lizhong Group strictly abides by the Water Law of the People's Republic of China, the Law of the People's Republic of China on Prevention and Control of Pollution, the Environmental Protection Law of the People's Republic of China and other relevant laws and regulations and local policies, and has formulated relevant management systems such as the Regulations on Management of Water Use and the Policies on Management of Periodic Maintenance of Water Supply Facilities. Each company in the Group regularly entrusts professional testing organizations to conduct water balance tests and carries out special rectification based on the test results. This helps continuously improve the utilization rate of water resources. Advanced equipment has been adopted to increase the use of reclaimed water and maximize the reuse of water resources. In 2023, Tianjin Lizhong Wheel Co.Ltd and Baoding Lizhong Wheel Manufacturing Co.Ltd.achieved a water resource reuse rate of 45% We aim to reach the industry's best-in-class standards by the end of 2024 in terms of overall water conservation.

As of December 31, 2023

Lizhong Group had used

270,399 m³ of reclaimed water

Water utilization balance chart

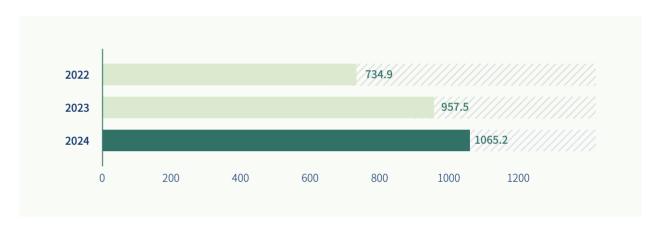


Promoting the use of recyclable packaging materials

Lizhong Group responds to the national policy of sustainable development and environmental protection and continues to promote the use of recyclable packaging materials. We reduce the use of disposable packaging materials and adopt recyclable ones, which reduces the loss of wood resources and lowers waste generation.

Of the 31 domestic supporting customers of Lizhong Wheel, 26 have used recyclable packaging materials. We used 9.575 million pieces of recyclable packaging materials in 2023, representing 96.6% of orders from all domestic supporting customers.

In 2024, 10.652 million pieces of recyclable packaging materials will be used for orders from domestic supporting customers. At the same time, we promote the use of recyclable packaging materials by overseas customers, such as Opel supplied by Xintai Wheel Manufacturing Co., Ltd. and Hyundai supplied by Baoding Lizhong Wheel Manufacturing Co., Ltd.



Green office

Lizhong Group pays attention to resource conservation and pollution control in the process of operation, and actively promotes the concept of green operation in office to reduce the impact on the environment.



We prioritize online cloud video conferencing, which reduces the frequency of off-site meetings, cuts operating costs and reduces carbon emissions from business travel.



To help reduce paper waste, we carry out online rather than paper-based approval procedure.



We prioritize the use of LED lighting in office areas to reduce energy consumption and waste of resources.

Environmental protection publicity and drills

Lizhong Group attaches great importance to the publicity of environmental protection and the drills of environmental emergencies, and strives to improve the environmental protection awareness and environmental emergency handling ability of all employees, and improve the technical level and professional quality of environmental protection professionals. We carry out various environmental training and emergency drills every year to minimize environmental-related risks. To raise employees' awareness of environmental protection, we take measures in all aspects of the production process according to the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste. We equip the factory and workshops with sweepers and sprinklers, which clean the site every day to lower the hazardous nature of solid wastes.

Sustainable Technological R&D System for Industrial Chain

Technological R&D management system for the industrial chain

Collaborative R&D throughout the entire industrial chain represents the core competitiveness of Lizhong Group. Under the principle of "promoting corporate development by scientific and technological progress", we formulate clear technological R&D objectives and strategic planning and ensure that the R&D work matches our strategic development. Adhering to the concept of innovative development and regarding innovation as the driving force, we establish a technology R&D management system for the whole industrial chain. In 2023, the Group invested a total of RMB 744.92 million in scientific research, with 2,054 technological R&D and quality control employees, of which, R&D employees accounted for 17.17% of the total.

The project "Hebei Engineering Research Center of Recycled Aluminum Alloy Automobile Parts Manufacturing", which is jointly constructed by Baoding Lizhong Dong'an Light Alloy Parts Manufacturing Co., Ltd., Hebei University of Technology, University of Science and Technology Beijing, and Hebei New Lizhong Nonferrous Metals Group Co., Ltd., has been formally included in the preparatory plan for the construction of provincial engineering research centers.

Baoding Lizhong Wheel Manufacturing Co., Ltd. obtained the title of "Hebei Provincial Science and Technology Leader Enterprise", and Tianjin Lizhong Light Alloy Forging Co., Ltd. obtained the title of "Tianjin Science and Technology Leader Cultivation Enterprise".

Lizhong Sitong Light Alloys Group Co., Ltd. participated in the "14th Five-Year Plan" National Key Research and Development Program, focusing on the project of "Key Technologies for New Type Aircraft Aluminum Alloy Plate Featuring Ultra-High Strength, Toughness, Fatigue Resistance, and Damage Tolerance".

Six laboratories including the Testing Centers of Hebei New Lizhong Nonferrous Metals Group Co., Ltd., Lizhong Sitong Light Alloys Group Co., Ltd., Experiment Center of Tianjin Lizhong Wheel Co., Ltd., Laboratory of Baoding Lizhong Wheel Manufacturing Co., Ltd. Tianjin New Lizhong Alloy Group Co., Ltd., and Xintai Wheel Manufacturing Co., Ltd. passed the ISO 17025 certification.

Baoding Lizhong Wheel Manufacturing Co., Ltd. passed the acceptance of the project "Research and Application of Lightweight Wheel Technology with a Highly Tough Hollow Structure" by the Hebei Provincial Science and Technology Department.

Lizhong Sitong Light Alloys Group Co., Ltd. has obtained the titles such as the Champion Enterprise in Individual Fields in Hebei Province's Manufacturing Industry, and the Leading Enterprise in Hebei Province's County-Level Characteristic Industry Clusters.















The Group conducted technical exchanges with Hoesch Germany

While focusing on the R&D, we are also increasing international cooperation and deeply integrating our global scientific research forces to facilitate technological innovation and corporate development. We have established strategic cooperation with 10+ domestic and foreign universities and R&D institutions such as the Chinese Academy of Sciences, National Supercomputing Center, Tsinghua University, Beihang University, University of Science and Technology Beijing, and Brunel University London to deepen the cooperation on production, education and research. We actively drive key technology breakthroughs in the industry, build a technological innovation platform, and set up an R&D team for new products and new technology. We are committed to high-tech, high-quality aluminum alloy wheel R&D and transformation of results. Lizhong Sitong Light Alloys Group Co., Ltd. acquired MQP in the UK in 2016, a global technology company specializing in the research and development of high-end grain refiners, then established research platforms such as the joint research center at Brunel University, UK, and Wannike laboratory in Sweden, and introduced the technology into the production process



Lizhong Group actively participated in the development of national and industry standards. We have presided over or participated in the preparation or revision of 73 national, industry and group standards, in a way to effectively promote the orderly and high-quality development of the industry. As of December 31, 2023, Lizhong Group owned 1,100 patents, including 136 invention patents, 877 utility model patents and 87 design patents, and had 202 global leading scientific and technological achievements.

Lizhong Group respects intellectual property rights, establishes an intellectual property management organization with professional personnel, and formulates standardized systems and procedures, including the intellectual property management system, to form a scientific intellectual property protection system. In August 2022, Baoding Lizhong Wheel Manufacturing Co., Ltd. successfully passed the certification of GB/T29490-2013 Intellectual Property Management System by Zhongzhi (Beijing) Certification Co., Ltd., which provides the management basis for the company's intellectual property management and ensures the comprehensive and systematic management of intellectual property. In 2023, the company was identified as a National Intellectual Property Advantageous Enterprise, which enhanced the company's innovation ability, improved the commercial position and competitive advantage, and promoted the healthy development of intellectual property work.



Case

Conductivity improvement technology for aluminum alloy products

Through material composition optimization and organization design, Lizhong Alloy Group has achieved a good balance between yield strength and thermal and electrical conductivity of aluminum alloy materials. The LZGDD-4 highly conductive aluminum alloy product developed by Lizhong Alloy Group is applied in rotors of high-speed automobile drive motors, which enables nearly 60% weight reduction of the conductor and promotes a significant increase in the power density of the electric drive system. As the first low-cost A-Mg-Si high-speed aluminum alloy rotor material in the industry, our LZGDD-4 product leads the direction of the research and application of the rotor material for high-speed drive motors.



Case

High-yield performance enhancement technology for aluminum alloy products

Through the composition and organization design of aluminum alloy, Lizhong Alloy Group has greatly enhanced the performance of the alloy in the as-cast state: tensile strength \geq 380 MPa, yield strength \geq 240 MPa and elongation \geq 4%. Compared with the traditional A380 aluminum alloy, the yield strength of the newly developed LZ.Al-Si-Cu-Mg high-yield heat-treatment-free diecasting aluminum alloy material increases by more than 50%. This technology can meet the specific high-yield service conditions, and also enables the lightweight design of traditional A380 and ADC12 series material parts, thus facilitating the weight reduction and carbon reduction of the electric drive assembly shell of target parts.



Case

Research and application of characterization analysis technology for aluminum alloy wheel substrate and surface materials

The project "Research and application of characterization analysis technology for aluminum alloy wheel substrate and surface materials" is jointly carried out by Baoding Lizhong Wheel Manufacturing Co., Ltd. and the Institute of Oceanology, Chinese Academy of Sciences. The project analyzes the composition and structure of the surface coating of aluminum alloy wheels as well as the bonding mechanism between the coating and the substrate. Based on the analysis, the project clarifies the compositional organization and structure of the corrosion products formed after the coating fails, determines the influence of the coating improvement process on the compositional organization of the coating and the corrosion resistance, and puts forward a rapid detection method for the surface coating of aluminum alloy wheels. The results of this project improve the corrosion resistance of aluminum alloy wheels and provide technical support for product failure analysis, technical improvement, and specific properties monitoring of incoming materials, which accelerate the development of the aluminum alloy wheel industry.



Case

Simulation automation facilitates efficient and lean R&D of products

The project "Key technology R&D of the automated simulation system for lightweight aluminum alloy wheels" is jointly carried out by Baoding Lizhong Wheel Manufacturing Co., Ltd. and Yancheng Institute of Technology. To solve the problems of standardization, automation and integration in the simulation of lightweight aluminum alloy wheels, this project uses the secondary development capability of simulation software to research the key technologies of the automated simulation system for lightweight aluminum alloy wheels. In this project, we have established a standardized, automated and integrated wheel simulation and analysis process and method. In addition, we have developed a user-friendly, easy-to-operate automated simulation system with comprehensive interfaces, realizing the automation and integration of wheel simulation and analysis. The results of this project improve the quality and reliability of wheel products, cut R&D costs of wheel products, enhance the core competitiveness and international competitiveness of the Group, and facilitate the digital transformation of the aluminum alloy wheel industry.



Case

Development of grain refiners for battery aluminum foil

Battery aluminum foil is the basic material of new energy lithium batteries, and the rapid development of the new energy field puts forward higher requirements on the performance of battery aluminum foil. The grain refiner for battery aluminum foil developed by Lizhong Sitong is an important additive material for the production of battery aluminum foil. It plays a decisive role in the quality of battery aluminum foil products and can significantly improve the comprehensive performance of battery aluminum foil. This product meets the quality demand of grain refiners for high-performance battery aluminum foil. Furthermore, it enhances the competitiveness of our products and boosts the new energy field.



Case

Low interstitial impurity and high homogenization control technology for aerospace-grade intermediate alloy

To meet the stringent quality requirements of aerospace-grade titanium alloys, Lizhong Sitong Light Alloys Group Co., Ltd. has achieved the control of low interstitial impurities in intermediate alloys for aerospace-grade titanium alloys by combining the principles of self-propagation and electromagnetic induction melting. Featuring fine organization and high homogeneity of composition, the intermediate alloys produced based on this technology have been applied to the aerospace-grade titanium alloy materials.



Case

Microstructure control technology of aluminum-scandium rare earth intermediate alloy for aerospace-grade aluminum alloy materials

By optimizing and adjusting the processes of charging, alloying and casting, Lizhong Sitong Light Alloys Group Co., Ltd. has mastered the microstructure control technology of aluminum-scandium rare earth intermediate alloy for aerospace-grade aluminum alloy materials. Featuring low impurity and high homogeneity, the products produced based on this technology have been applied to the aerospace-grade aluminum alloy materials.



The Group signed a contract with Tsinghua University

Sustainable Supply Chain Management

Lizhong Group is committed to building a green and low-carbon supply chain. On the basis of meeting customers' requirements for and audits of product carbon footprints, the Group is also promoting the sustainable construction of its own supply chain. The Group prioritizes raw and low carbon materials during purchasing and utilization, and incorporates management factors such as environmental and social management responsibilities into the supplier audit and evaluation system.

Supplier management system

The purchasing departments of all sectors of Lizhong Group are responsible for supplier management and have formulated the Supplier Management Procedures. To further standardize supplier behavior, Lizhong Group has signed the Sunshine Procurement Agreement with suppliers, which clearly defines the obligations and rights of both parties to avoid any form of benefit transfer.

Selection criteria for core suppliers of Lizhong Group





Has obvious leading advantages in the





Complies with the contract in the conduct of production and business activities, and has sound and effective quality management/production capacity/financial management





Has passed the quality management system certification and other system certifications





Designated by customers





Has passed the necessary product certification





Sources from environmentally and socially responsible suppliers to ensure that metals used in raw materials are not sourced from conflict



Supplier due diligence

At the beginning of each year, Lizhong Group formulates a supplier audit plan and carries out audits according to the plan. The process focuses on due diligence investigation of suppliers. We issue supplier questionnaires to investigate and audit the supplier's basic situation, technological R&D strength, quality management, equipment production capacity, logistics, emergency response and so on. The investigation results will be used as one of the scoring items for comprehensive supplier evaluation and be incorporated into the annual promotion and demotion assessment.

Supplier withdrawal mechanism

Lizhong Group has formulated clear supplier withdrawal mechanisms, such as the Supplier Blacklist Management System, to minimize the potential negative impact when a supplier violates national laws and regulations, breaches the contract, or supplies unqualified products.

When a supplier violates the laws and regulations, we will evaluate the risk of the supplier, and decide whether to suspend or continue our cooperation according to the risk evaluation.

When a supplier breaches the contract, we will communicate with the supplier in writing to ask it to perform the contract. If the supplier still fails to perform the contract, the liability for breach of contract shall be investigated according to the relevant terms of the contract.

If a supplier supplies unqualified products, we will solve the dispute by returning goods and lowering prices, and carry out third-party testing if necessary. If the supplier's products have serious quality problems, we will ask the supplier to issue a rectification report. We will suspend cooperation with suppliers whose rectification is ineffective.

Supplier withdrawal mechanism

Sustainable supply chain management

Aluminium Stewardship Initiative (ASI) audit has been added to the supplier audit process of Sitong New Metal Material segment of Lizhong Group, which evaluates the suppliers' corporate integrity, greenhouse gas emissions, air pollutants, water pollutants, wastes, water resources management, biodiversity, occupational health and safety, and supervises the performance of suppliers.

Meanwhile, Sitong New Metal Material segment has formulated the Statement on the Purchasing Policy of Conflict-free Metals to source from environmentally and socially responsible suppliers of raw materials. This ensures that metals used in raw materials supplied to the Group are not sourced from conflict areas.

Use of renewable energy



Lizhong Group gradually increases the proportion of renewable energy power use by purchasing International Renewable Energy Certificates (I-RECs) based on the power use of the factories. In addition, we indirectly purchase green power certificates for aluminum supplied from upstream aluminum electrolysis plants that use thermal power, effectively reducing Scope 2 carbon emissions in the supply chain and contributing to the achievement of emission reduction targets.

Use of green and low-carbon aluminum ingot



We gradually increase the use of low-carbon aluminum, sort the aluminum ingots from different suppliers in order of their carbon footprint value from low to high, and reasonably set the proportion of use based on our carbon emission targets and customers' requirements, which greatly reduces the carbon footprint value of wheel products.

Use of recycled aluminum and recycled silicon



We have set up a recycled metal raw material purchase and utilization center and established a comprehensive management system for the purchase, supply, use and marketing of recycled metal. Besides, we continuously increase the use of recycled aluminum, recycled silicon and other materials. Currently, the proportion of A356 recycled aluminum added can reach up to 75%, which plays a positive role in achieving energy saving and carbon reduction.

Green supply chain



The location of Lizhong Group's new factory gives full consideration to convenient logistics of the raw material supply chain. We preferentially choose places in the vicinity of electrolytic aluminum plants and directly extract aluminum liquids to reduce the cost of natural gas and fuel oil. In 2023, 180 thousand tons of aluminum liquids were directly extracted, which saved 13 million m³ of natural gas and 670 thousand liters of diesel fuel.

Sustainable purchase

Focusing on Customer Needs and Pursuing Customer Satisfaction

Lizhong Group has successfully established a comprehensive and rigorous product quality control system and customer service management system. Presently, it has established strategic partnerships with numerous renowned enterprises at home and abroad. With high-quality service and excellent products, Lizhong Group has garnered widespread acclaim and high recognition in the industry.



Certifications passed by major companies of Lizhong Group

ISO 14001 Certification — Environmental Management Systems

IATF 16949 Automotive QMS Certification

TISAX international standards

ISO 45001 Certification — Occupational Health

and Safety Management Systems

ISO 50001 Certification — Energy Management System

ISO/IEC 17025 — Testing and Calibration Laboratories

Technical quality certifications on international markets

DOT (US), TIP general certification for labs (US), VIA lab certification (Japan), KBA (Germany), INMETRO (Brazil), SNI (Brazil), ARAI (India) and TR CU (EAC) certification



Quality Control System



The main subsidiaries of Lizhong Group have passed the ISO 9001 and IATF 16949:2016 certifications for quality management. The quality departments of the business sectors are in charge of overall quality management affairs and have formulated management procedures, including the Manufacturing Process Management Procedure, the Product Audit Management, and the Nonconforming Products Management Procedure. We continuously improve product quality by enhancing process control and "zero product defect" management. Continuous efforts are devoted to process, product and system audits within the Group, so as to guarantee the effective implementation of its quality management systems from the three perspectives. Improvement and prevention measures are taken to tackle problems found during the audit. The improvement measures are specifically taken in the design and development, process control, inspection and verification, and error prevention respects, to prevent the recurrence of quality problems, improve the process assurance capability, and better satisfy customers' requirements. Meanwhile, Lizhong Group implements an effective quality traceability system to trace the source of product quality issues and identify hidden troubles. The Group uses tools such as APOP, MSA, SPC, FMEA, and PPAP to continuously optimize quality control in new product development and manufacturing processes.

Lizhong Group pursues "zero defects" in project management. To that end, it has designated "zero defects" management personnel for all key processes, including supervisors who are in charge of daily spot checks and management team leaders who are responsible for routine inspections. When finding hidden quality issues, the Group will organize the responsible departments for correction, follow-up inspection, and improvement, include typical issues in the daily spot check for ensuring "zero defects", and make "zero defects" warming cards. The Group will follow up on quality issue checking and prevention progress, to effectively control and manage projects aimed at "zero defects"

Lizhong Group has three R&D and testing centers, which can carry out more than 120 performance tests and analyses for aluminum alloy materials, aluminum alloy automobile wheels, motorcycle wheels, aluminum alloy automobile parts, aluminum-based functional intermediate alloys, and other products. The testing centers are equipped with numerous international first-class testing equipment, including ZISS (EV018) scanning electron microscope, MTS hydraulic servo actuator, YXLON industrial CT, Thermo ICP Emission Spectrometer, Holland Panalytical X-ray fluorescence (XRF) spectrometer, ARL spectrometer, ZISS metallurgical microscope, ultra DoF laser spectroscopy microscope, X-ray diffractometer, Germany Makra biaxial fatigue tester, bending fatigue tester, radial impact tester, and ATLAS lamp aging tester. The comprehensive testing capability can meet the test requirements of domestic and foreign mainstream customers.

Lizhong Group insists on responsible sales and marketing and is free from exaggerated marketing.

As of December 31, 2023

Lizhong Group has not experienced any product recalls.

Customer Service Management

Upholding the customer service philosophy "focused, dedicated and expert", Lizhong Group keeps improving customer services before, during and after sales. The Group has established effective customer service systems and customer relationship management procedures such as the Service Control Procedure, to specify the responsibilities of its departments, meet customers' needs, and build up its ability to serve customers.

Lizhong Group carries out a customer satisfaction survey every year through the distribution of Customer Satisfaction Questionnaires, customer visits by sales persons, or on-site customer information recording. In such a manner, the Group manages to timely understand customers' needs and problems and instruct its relevant departments to make rectification based on the needs and problems, ensuring that its product quality always meets customers' needs.

As of the end of the reporting period,

Lizhong Group's customer satisfaction rate was

99%



Response mechanisms to customer complaints

Lizhong Group has formulated customer complaints management procedures such as the Customer Quality Complaint Management Procedures and the Customer Complaint Handling SOP. We set up an after-sales service department, which is responsible for managing customer complaints. Taking Baoding as the command center, our domestic customer service covers North China, Central China, East China, and South China. Taking the Group as the command center, our overseas customer service covers North America, Asia, and Europe, and is conducted by the overseas factories with assistance from the agency teams. This enables all quality issues to be dealt with quickly, which is highly recognized by customers. In this way, customer complaints are resolved efficiently and the quality of service is improved continuously.

To address problems customers encounter after sales, the Group has taken a string of measures, such as setting up a special team, compiling 8D analysis reports to find the root causes of the problems, taking targeted rectification measures, monitoring the effectiveness of those measures, and building a database of lessons learned for identifying potential quality problems in products in the same categories. In this way, the Group manages to prevent similar problems from happening again, thus ensuring continuous quality improvement.

For after-sales issues, the Group promises to give a quick response within 24 hours for emergency containment. We will complete issue analysis and formulate effective improvement measures within 3-7 working days, and submit a report according to the time required by the customer. The after-sales service department establishes customer complaint accounts, shares information within the Group, and pays return visits to customers by telephone, WeChat, e-mail and field visits to ensure that the issues are solved. A dedicated person is arranged to monitor the quality performance indicators on our customers' website to rapidly respond to any abnormality that is found and ensure continuous improvement.



Recognition by main customers

As of December 31, 2023, Lizhong Group had secured strategic partnerships with nearly one hundred well-known companies at home and abroad and won their recognition with its high-quality products and services. Our honors include a Q1 certificate granted by Ford, outstanding-quality supplier of FCA in North America, excellent-quality supplier of GM, global outstanding quality supplier of FCA, global excellent quality award of Chrysler, global outstanding supplier of Hyundai-Kia, outstanding supplier of Dongfeng Nissan, outstanding supplier of Changan Mazda, special contribution award for SAIC supply chain guarantee, quality excellence partner of NIO, overseas aftermarket 2T excellent supplier, outstanding supplier of the Chinese aluminum processing sector and Northeast Light Alloy Co., Ltd., and long-term partnership with NIO NEXTEV LIMITED. As of December 31, 2023, Lizhong Group has obtained new awards such as Silver Award of Dongfeng Honda Engine NHC Presentation Conference, Quality Supplier Award of Mysteel, Excellent Supplier Award of Exquisite Automotive, 2023 Top 10 Excellent Supplier of www.cnal.com, Excellent Quality Award of Yongjie Supplier Conference, Pioneer Award of Green Manufacturing of ZTT, Production Guarantee Award of Shaanxi Fast Automobile, Excellent Supplier Award of Suzhou Xiaodong Metal, and Strategic Partner of Great Future Group.



Compliance Operation Green and Sustainable Development

Lizhong Group steadfastly implements the strategy of innovation-driven development, promoting green growth through technological innovation. In response to global climate challenges, we proactively adjust energy strategies in alignment with domestic and international policies. We strive to minimize the environmental footprint of our production and operations, enhance resource efficiency, and implement robust energy-saving measures. We are dedicated to fostering harmonious coexistence with the natural environment.





Environmental Management

Environmental management system

In the practice of environmental management, Lizhong Group adheres to the policy of "complying with laws and regulations, meeting emission standards, energy conservation and consumption reduction, pollution prevention, continuous improvement, and environmental friendliness". Through continuous self-examination and evaluation, the Group optimizes the environmental management process and upgrades the environmental protection standards to ensure the effectiveness of environmental management measures and the continuous improvement of environmental performance.

To raise the importance of environmental management, a Safety and Environmental Protection Committee under the direct management of the Board of Directors has been set up. We employ professional and technical personnel, establish an effective organizational structure, and conduct monthly summaries, quarterly meetings and year-round monitoring of environmental management of the subsidiaries.

We implement a three-level management structure group level, company level, and department level to ensure the standardization and effective implementation of environmental management. To meet international environmental management standards, all major subsidiaries of the Group have passed the ISO 14001 certification. Based on the requirements of this standard system and the provisions of the Environmental Management Law, the Group has formulated key environmental management systems, such as the Compilation of Safety and Environmental Management Systems and the Environmental Management Manual, to guide and standardize the environmental management practices of subsidiaries.

In order to comply with the provisions of the Measures on Legal Disclosure of Enterprise Environmental Information promulgated by the Ministry of Ecology and Environment, a total of 16 companies of Lizhong Group completed the disclosure of enterprise environmental information in the local enterprise environmental information disclosure system in accordance with the specific requirements of the local ecological environment agencies.

In response to the local government's call, Lizhong Group launched a cleaner production project, set up a cleaner production audit leading group, and invited a third-party professional organization to upgrade and transform its original high-energy-consuming, high-pollution process links to build a cleaner production line. At present, a total of 10 companies including Lizhong Group have passed the cleaner production audit and acceptance by the local government.





Environmental risk management

Lizhong Group has formulated a comprehensive environmental management strategy, which is coordinated by the Safety and Environmental Protection Management Committee. The strategy requires the Group's four main business segments, namely Lizhong Wheel, Lizhong Alloy, Sitong New Metal Material, and Lizhong New Energy, to adopt independent control measures based on their business characteristics. Evaluations by third-party organizations and cross-department checks are also carried out. Through these measures, each segment can effectively identify and manage environmental risks and complete the Environmental Risk Assessment Report and the Environmental Risk Accident Plan in compliance with national regulations. In this way, environmental hazards can be rectified and managed in a timely manner.

We require our subsidiaries to conduct various emergency drills to avoid environmental management risks, including emergency drills for handling equipment failures and emergency drills for pollution spills. This can improve the emergency response capabilities of employees, reduce the potential damage caused by environmental emergencies, and prevent and effectively control adverse environmental factors.

Lizhong Group has formulated the Environmental Management Assessment Standards, which effectively regulate the daily behavior of employees, and established a normalized environmental management mechanism to promote the integration of environmental management into production and operation, so as to realize the continuous optimization of environmental management.

Environmental risk analysis Implementation plan on improving environmental risk prevention and control and Source term analysis of emergency response measures environmental risk accident Analysis on the gap between Six analysis existing risk prevention aspects of the Risk assessment of environmental risk and control and emergency environmental emergency assessment report response measures response capability Analysis of environmental emergency and its consequences

Waste Management

Management of three wastes

Lizhong Group's Safety and Environmental Protection Management Committee is responsible for coordinating and supervising the management of waste gas, wastewater, and solid and hazardous waste by Lizhong Group's subsidiaries.



Waste gas

Lizhong Group strictly adheres to the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution and other relevant laws and regulations, and sets its annual target for the reduction of waste gas emissions in accordance with the Compilation of Safety and Environmental Management Systems. As of December 31, 2023, Lizhong Group's subsidiaries have continuously equipped environmental protection facilities in each production plant and production line. The particulate matter is treated by a bag filter and discharged through a 15m high exhaust pipe. The organic waste gas is treated by "adsorption and concentration by zeolite molecular sieve rotor + RTO" and discharged through a 15m high exhaust pipe. Besides, an online monitoring system is provided. The emissions of waste gases meet the relevant national and local standards and requirements.



Wastewater

The subsidiaries of Lizhong Group have carried out relevant works in strict accordance with the wastewater management requirements in the Compilation of Safety and Environmental Management Systems. The subsidiaries of Lizhong Group have equipped each production plant with supporting facilities for the comprehensive treatment of polluted industrial wastewater and installed an online monitoring system for polluted industrial wastewater at the main discharge port of the effluent treatment plant to monitor the treatment of polluted industrial wastewater in real time. After the comprehensive wastewater is treated by the urban wastewater treatment plant, the water quality can meet the relevant national and local standards and requirements.

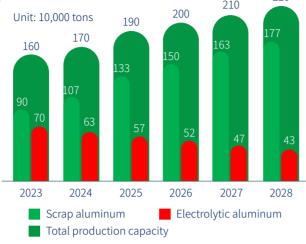


Solid waste In accordance with the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, the Standard for Pollution on the Storage and Disposal Site for General Industrial Solid Wastes and other environmental protection laws and regulations, as well as relevant national environmental protection laws and regulations in force at the place where the project is located, Lizhong Group strictly manages the generation, transfer and storage of solid wastes and advocates the reuse of solid waste resources to effectively reduce the generation of solid wastes. General solid wastes are effectively disposed of and are not discharged.

In order to treat hazardous wastes, Lizhong Group has established the Hazardous Waste Management Rules. We conduct intelligent online supervision and management from the aspects of collection, storage, transportation, utilization and disposal in accordance with such systems. We also purchase international advanced equipment, hire a professional third-party team to manage hazardous pollutants, and store hazardous wastes in accordance with the Standard for Pollution Control on Hazardous Waste Storage (GB18597-2023), ensuring that all pollutants are treated in a safe and harmless manner according to relevant national laws and regulations. As of December 31, 2023, all of Lizhong Group's hazardous wastes were temporarily stored in hazardous waste rooms. With a 100% disposal rate, the hazardous wastes were regularly disposed of by qualified third parties.

Response to Climate Change

In response to the "UAE Consensus" put forward by the 28th Conference of the Parties to the UN Framework Convention on Climate Change (COP28), Lizhong Group has established a comprehensive carbon management organization structure and management system, to reach the target of "keeping the increase in global average temperature to well below 2 $^{\circ}$ C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 $^{\circ}$ C" and respond to the national policy of gradually transforming the dual-control of energy into dual-control of carbon emissions. By carrying out carbon inventory, product carbon footprint accounting and certification, and carbon quota fulfillment, building a unified digital carbon management platform, and optimizing the carbon emission reduction management scheme for the whole industrial chain, we effectively prevent and respond to climate risks and contribute to the realization of the global sustainability goals.



Lizhong Alloy Group replaces electrolytic aluminum with recycled aluminum, aiming to achieve carbon peak by 2028

Carbon management organization structure

The Board of Directors of Lizhong Group is in overall charge of the whole situation, and the Sustainable Development Division is set up under the Sustainable Development Committee to conduct routine carbon emission management. By formulating carbon management norms, processes, and systems and establishing a carbon management system, the carbon emission management level of Lizhong Group has been improved. Lizhong Group also makes every effort to deploy the path of realizing "Carbon Peak and Carbon Neutrality".

Comprehensive monthly evaluation and annual audit system for carbon management

The Sustainable Development Division of Lizhong Group incorporates carbon management into the Environment and Sustainable Development Self-Evaluation Form, which is used to evaluate the fulfillment of carbon management work of each subsidiary every month. Meanwhile, the Sustainable Development Division of Lizhong Group regularly issues the Monthly Analysis Report on Environment and Sustainable Development every month. Annual audits are conducted for each segment to continuously enhance Lizhong Group's carbon management capability.

Carrying out carbon inventory

In 2023, the Sustainable Development Division of Lizhong Group organized an independent carbon inventory by each subsidiary in accordance with the Carbon Inventory Management Procedure and issued the Monthly Analysis Report on the Carbon Inventory of Lizhong Group every month. This measure meets the needs of Lizhong Group's sustainable development, and the advantageous resources are integrated to enable unified planning, unified management, unified coordination and unified implementation of Lizhong Group's carbon management work.

The Monthly Analysis Report on the Carbon Inventory of Lizhong Group collects the highlights of internal energy-saving and carbon reduction management. New technologies, products and equipment are introduced to reduce the carbon emission intensity of each subsidiary. The carbon inventory results of each subsidiary are disclosed every month to improve the ability to respond to the carbon market.

The Sustainable Development Division monitors the changes in the carbon emission intensity of each subsidiary, conducts benchmarking analysis, and requires each subsidiary to independently carry out energy-saving and emission reduction efforts. The average carbon emission intensity of Lizhong Group in 2023 was 5.4% lower than that in 2022.

Note: Carbon emission intensity refers to the carbon dioxide emission equivalent per unit of product, that is, carbon dioxide emission equivalent/product output.

On June 20, 2023, Baoding Lizhong Wheel Manufacturing Co., Ltd., Tianjin Lizhong Wheel Co., Ltd. and Xintai Wheel Manufacturing Co., Ltd. had their 2022 carbon inventory accounting completed by Lianhe Equator Environmental Impact Assessment Co., Ltd., which is a third-party organization. A certificate has been obtained from TÜV Rheinland (China) Ltd.



Product carbon footprint calculation and certification

As of December 31, 2023, Lizhong Group has selected a total of 42 models of typical products and entrusted Lianhe Equator Environmental Impact Assessment Co., Ltd., a third-party organization, to conduct product carbon footprint calculation. We have obtained certification from TÜV Rheinland (China) Ltd., which provides a basis for improvement and defines the improvement direction and target for our carbon reduction work.

Carbon quota fulfillment

In 2023, the Sustainable Development Division of Lizhong Group compiled and issued the Lizhong Group Carbon Quota Management Procedure, achieving the unified management of carbon quota work. While meeting the requirements of the national and local environmental protection departments, we increase economic benefits through carbon asset trading and continue to reduce the carbon emission intensity of each subsidiary.

In 2023, Tianjin Lizhong Wheel Co., Ltd., as a pilot enterprise for carbon emissions permit trading in Tianjin and an enterprise included in the quota management, completed the accounting of carbon emissions for 2022 and the approval and issuance of quotas. It also fulfilled its obligations in accordance with the regulations.

Carbon quota management process

Verify the list of emission control enterprises

Each year, all subsidiaries verify whether they have been included in the list of emission control enterprises in the national carbon market or local carbon emission permit trading pilots.

Report the carbon quota fulfillment program

Each subsidiary prepares the Carbon Quota Fulfillment and Trading Program and submits it to the person in charge of the related segment, who then submits the program to the Sustainable Development Division.

Surrender carbon quota

The Sustainable
Development Division
formulates the carbon quota
fulfillment and trading
strategies and supervises
carbon quota fulfillment and
trading by each subsidiary.

Formulate a work plan

Each subsidiary analyzes the current status of carbon emission management and formulates the Annual Carbon Reduction Work Plan based on the carbon quota fulfillment situation of the current year.





ISO 14064 carbon inventory certificate



Training on sustainable development management capability

To quickly implement the dual-carbon management project of Lizhong Group, the Sustainable Development Division arranges for the personnel involved in dual-carbon management of each subsidiary to participate in the nationally recognized "Carbon Manager" qualification training, thus enhancing the comprehensive ability of dual-carbon management.

In 2023, Lizhong Group organized and held training sessions on ESG management, green finance, green government subsidy programs, and CBAM. By publicizing our concept of sustainable development, we speed up the construction of green plants and green supply chains, promote sustainable development.



Establishing a unified digitalized carbon management platform - CarbonStar

Focusing on the national vision of carbon peak and carbon neutrality and valuing green and low-carbon development, Lizhong Group works with Lianhe Equator Environmental Impact Assessment Co., Ltd. to launch a digital, intelligent and visualized carbon management platform based on the Internet and big data technology. This platform integrates five core functions under multiple domestic and international methodologies, including organization carbon inventory, product carbon footprint, carbon emission analysis and statistics of the Group and the four major business segments, carbon asset management, and carbon market condition, to achieve accurate accounting and business empowerment.

To continue to deepen the digital transformation, Lizhong Group will upgrade the CarbonStar carbon management platform to strengthen the monitoring and optimization of energy consumption and achieve the fine management of energy and carbon emissions. Multiple languages will be supported to meet internationalization and diversified business needs. Besides, we will add a CBAM management module to the platform to unify the management of companies included in CBAM. We will take advantage of the platform to actively respond to the European Union's requirements for CBAM.



Digital carbon management platform - CarbonStar



↑ The Group participated in the BMW Group China Sustainability Summit

Implementation path and scheme for carbon reduction in the whole industrial chain

Lizhong Group has optimized the carbon reduction implementation scheme for the whole industrial chain. We take measures from product design, supply chain, production, packaging, transportation and recycling to reduce carbon emissions in the whole life cycle of products.

Emission reduction for product design

- Lizhong Group prioritizes the planning of recycled aluminum application production lines based on a 75% ratio, 35% of which are in-plant scraps (processing residuals and back-station scrapped wheels) and 40% are outsourced A356 aluminum alloy scrapped wheel recycling materials. The carbon footprint of the product can be reduced by about 55% compared to that when 100% thermal aluminum is used as the raw material.
- Lizhong Group actively develops lightweight aluminum alloy wheel technology to meet the requirements of high-end passenger cars for lightweight and high-strength aluminum alloy wheels and to achieve the goal of energy saving and carbon reduction.

Emission reduction for the supply chain

- In the procurement of raw materials, the carbon footprint of suppliers' products is included in the scope of investigation. We incorporate the carbon footprint requirements into the procurement contracts and ask suppliers to provide a carbon footprint certificate and implement carbon reduction measures to jointly build a green supply chain.
- We have formulated the Equipment Procurement Procedure, which requires an internal expert evaluation in the process of purchasing equipment, and makes energy saving and carbon reduction an important indicator in the technical agreement of equipment.

Emission reduction for production

- We actively explore a new mode of energy conservation and emission reduction and increase the use of clean energy by constructing photovoltaic power generation. Through the transformation of high energy-consuming equipment and other measures, we optimize the efficiency of energy use, improve the proportion of waste heat utilization, and realize the continuous saving of energy.
- The Group makes an overall plan of distributed photovoltaic projects totaling 29.29 MW, of which 22.99 MW will be connected to the grid in 2024-2025. The average annual power generation capacity is about 26.35 million kWh. We prioritize the use of green power in the plant to reduce emissions from the production process.

Emission reduction for packaging

 Lizhong Group continues to promote the use of recyclable packaging materials. We reduce the use of disposable packaging materials and adopt recyclable ones to reduce carbon emissions.

Emission reduction for transportation

- Lizhong Group preferentially purchases raw materials as close as possible to its factories. At the time of factory location selection, Lizhong Group considers building factories in a place where upstream and downstream industries are clustered to shorten the transportation distance.
- Lizhong Group adopts the "door-to-door" sales model for the aluminum liquids produced from recycled aluminum, which can shorten the transportation distance of the products and reduce one remelting process in the whole life cycle of the products. For every ton of aluminum liquid produced, about 75 m³ of natural gas can be saved. At present, Lizhong Group has a sales volume of 477 thousand tons for recycled aluminum liquid. The total carbon emission of the whole product life cycle has been reduced by 76 thousand tons.
- We actively negotiate with customers to adopt water transportation with lower carbon emissions and avoid using air transportation as much as possible.

Emission reduction for recycling

 Lizhong Group reduces carbon emissions throughout the product life cycle by increasing the use of recycled materials.

Harmonious Workplace, Creating a Sense of Belonging

Lizhong Group is committed to sustainable development from a long-term perspective and actively fulfills its corporate social responsibilities. Guided by the people-oriented core value, we place great emphasis on employee training and development. We endeavor to create diverse career advancement opportunities, providing equal growth prospects for both technical and managerial talents. Moreover, we align the development vision of the Group closely with the personal career aspirations of our employees, so as to stimulate vitality for both the organization and the employees.





Employees' Rights and Benefits

Lizhong Group devotes itself to sustainable social development and takes the initiative to assume its corporate social responsibilities. Upholding a people-oriented development philosophy, the Group values talent production and development, provides multiple promotion channels for its skill-oriented and management personnel, and integrates corporate development and employee development, to further the healthy development of both the Group itself and its employees.

Employee hiring

Lizhong Group abides by all applicable labor laws and regulations and has formulated the Recruitment and Allocation Management Measures and standardized the processes of corporate need release, interview, and employment in accordance with the Labor Law of the People's Republic of China, the Labor Contract Law, and the Provisions on Prohibition of Child Labor. In accordance with the Staff Recruitment Management Process, the want ads of the Group are free from gender, race and age discrimination. To further promote equal, standardized and diversified employment, the Group has specially formulated the Administrative Provisions on the Prohibition of Discrimination and Administrative Provisions on the Prohibition of Forced Labor. As of December 31, 2023, no child labor or forced labor violations occurred in Lizhong Group.

Lizhong Group has developed long-term strategic cooperation with many recruitment companies, and it has been honored as the best employer of the year by Zhilian Zhaopin for many years in a row.

Under the principle of "positive cooperation, resource sharing, mutual benefit, complementary advantages and common development", Lizhong Group has established a long-term and close partnership with many schools. Lizhong Group provides a platform for the practice and employment of students in the schools, while the schools provide the Group with human resources and technical resources, thus achieving a win-win situation.



Employee diversification

Lizhong Group has set up subsidiaries in Hebei, Tianjin, Jilin, Inner Mongolia, Shandong, Jiangsu, Anhui, Hubei, Hunan, Chongqing, Guangdong, Hong Kong, Thailand, the Republic of Korea, the US, the UK, Mexico, Brazil, etc. Practicing a talent diversification strategy, the Group is sourcing all kinds of talents around the world. By "putting the appropriate personnel in the appropriate positions to assume the appropriate responsibilities", the Group is building a fair, just and open working and development environment for employees.

Democratic management and communication

Lizhong Group takes active measures to establish an open, transparent and democratic communication mechanism and build a democratic communication platform featuring diversification for employees.

Each subsidiary organizes two employee satisfaction surveys every year and holds regular staff forums based on the Administrative Provisions on Employee Satisfaction Survey, to understand what employees think and listen to their opinions and advice. As of December 31, 2023, the Group's employee satisfaction was 86.2%.

Lizhong Group has a trade union and allows employees to join the union of their free will. We have created various communication channels, such as employee communication groups on our OA system and WeChat groups, emails, phone calls, and work, video and telephone conferences. We organize a staff congress every year, for which the employee representatives are elected by secret ballot by all employees and have a term of office of two years.

Employee Development

Employee training

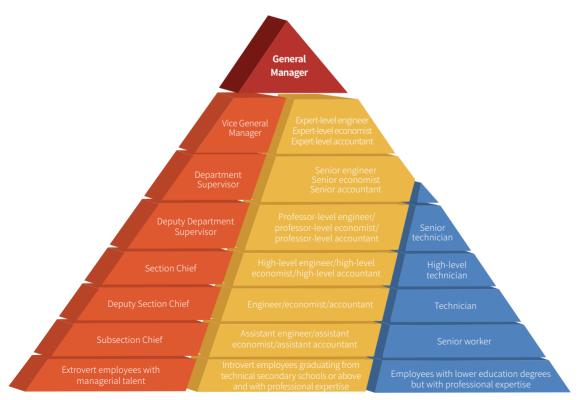
We highly value talent training. Following the policy of "Recruit excellent talents, cultivate expert-level employees, and promote loyal and excellent managers", we provide diversified training for employees at different levels. Specialized training lessons are developed based on our excellent training systems and employees' skill needs for their positions. As of December 31, 2023, the Group's training system included lessons on technical quality, human resources, procurement management, financial management, safety environment, and management. To make full use of internal intellectual resources, we formulate the Management Regulations for Internal Trainers and promote the selection and teaching of internal trainers. This not only improves the theoretical and teaching level of the internal trainers but also provides a way for the effective dissemination of the intellectual resources accumulated by the Group. We have established an online learning platform, which provides abundant learning courses and allows trainees to learn on the cell phone according to their interests.

In 2023, we set up the "Knowledge Academy" and established a three-tier training system. Relying on the "Knowledge Academy", we will carry out a series of training activities such as the "Middle-level Cadre Enhancement Class (Phase II)" in 2024 to continuously improve the quality of employees.

The Group's General Management Department organizes professional training for employees from the product development, mold, technology, and quality departments as well as the laboratory center of the Group and subsidiaries. From January 2023 to December 2023, 56 training sessions were conducted. A total of 2,864 trainees attended the training sessions, with an average of 51 trainees per session. Among them, 1,125 trainees completed the satisfaction survey, and the average satisfaction score of the training sessions was 95.44.

Employee promotion

In Lizhong Group, employees are promoted from lower positions to higher positions step-by-step. Professional development paths have been set from aspects of management, technology, and skill, ensuring adequate promotion opportunities for employees.



Employee promotion channels

Employees' Compensation and Benefits

Remuneration and benefits

Lizhong Group abides by the applicable laws and regulations including the Labor Law of the People's Republic of China, attaches equal importance to material and non-material incentives, and strives to improve the sense of happiness and sense of belonging of the employees. The Group has made a well-established compensation management system, providing premiums added to basic salaries, such as post pay, merit pay, piece rate pay, skill-based pay, expatriate pay, seniority pay and year-end bonus. In addition, we implement an equity incentive policy for some employees, which can enhance their sense of "ownership" and achieve the common development of employees and the enterprise.

In 2023, we reformed and optimized the compensation system in aspects of regional coefficients, performance appraisal, optimization of year-end reserve and so on, to form management systems that guide the implementation of the compensation system. To motivate the employees, we have formulated a competency level evaluation table for different positions, evaluated employees' comprehensive competency level every year, and adjusted employees' salaries based on their evaluation results. These measures can not only complete talent review but also play a positive role in retaining and attracting talents for the Group. Besides, we have formulated the Measures on Incentives and Rewards for Scientific and Technological Personnel, and set up awards including the Continuous Improvement Award, Monthly Advanced Worker in Quality, Safe Production Award, Rationalization Suggestion Award, Monthly Award for Meeting Manufacturing Targets, and 5S Field Evaluation Award.

Attaching great importance to the protection of each employee's rights and interests and fair assessment, we have established a comprehensive performance complaint process. Employees have the right to file a complaint if they disagree with the results of their performance appraisal. Employees can submit their complaints in writing or through the online system. The Human Resources Department, in collaboration with relevant departments, will review the complaint within a specified period of time and provide timely feedback on the review results as well as opinions on how to handle the complaint.

The Group actively formulates remuneration and benefits policies for overseas companies. In early 2023, the Group revised the remuneration system for expatriates of Xintai Wheel and Lizhong Mexico. Besides, the Group initiated the reform of the remuneration and benefits system for Thai employees of Xintai Wheel with support from a third-party organization to continuously improve the Group's competitiveness.



Employee Care

The Group sticks to a people-centered corporate culture, advocates a work-life balance for employees, and manages employees based on "regulation and emotion". By carrying out a variety of recreational activities, the Group creates a corporate cultural atmosphere featuring "unity, harmony, friendship, happiness and warmth".

Employees' benefits

The Group provides various employee benefits, including birthday benefits, holiday benefits, meal subsidies, travel and accommodation allowances, free medical examinations and high-temperature subsidies. By making well-rounded attendance regulations and continuously improving the office environment and accommodation, the Group strives to create a happy and harmonious working environment for employees.





Occupational Health and Safety

Management of occupational health and safety

The Group abides by the laws and regulations concerning occupational health and safety, including the Work Safety Law of the People's Republic of China, the Law of the People's Republic of China on Prevention and Control of Occupational Diseases, and the Fire Control Law of the People's Republic of China. Under the guideline of "safety first with an emphasis on prevention and overall control", the Group has established a sound management system of occupational health and safety, and drawn up documents such as the Work Safety Accountability System, the Rules and Regulations on Work Safety, and the Occupational Health and Safety Management System. Major subsidiaries of the Group have passed certifications including the ISO 45001 OSHMS certification and the RBA Validated Audit by the Responsible Business Alliance.

In 2023, Lizhong Group actively promoted intelligent production safety management and established management modules such as safety training, hidden risk identification, dual-control system, and special equipment management to achieve information sharing and multi-level supervision and enhance the Group's safety management level.



Objectives of occupational health and safety management

The Group has set six safety management objectives based on the safety management philosophy of "ensuring safety through design, management, and accountability" and the principles of "people-oriented" and "three controls and three musts".



Number of employees suffering from occupational diseases or suspected occupational diseases





Number of minor incidents





Coverage of occupational health examination

100%



Identification and rectification rate of hidden dangers

100%



Completion rate of safety training for employees

100%



Rate of special equipment operators with certificates

100%

Measures for occupational health and safety management

Occupational health examination and health monitoring

Lizhong Group checks its workplace for occupational hazards and evaluates workplace conditions according to the applicable regulations, insists on "pre-job, on-job and off-job occupational health examination" for personnel facing occupational hazards, and maintains a complete occupational health monitoring file for employees.





Occupational protection and safety technology improvement

All the business sectors of Lizhong Group keep improving their production processes, technologies, and environments. They make the workplace safer and reduce or eliminate personal injuries by replacing laborers with manipulators and minimizing equipment noise.





Fire safety management

To reduce the risk of fire and prevent fire accidents, Lizhong Group increases the investment in safety by adopting dust removal equipment with higher safety performance, installing automatic fire extinguishing devices in areas with fire risks and establishing micro fire stations.

Employee health management

To guarantee employees' mental and physical health, all the business sectors have signed consulting service agreements with hospitals nearby, to provide regular health examinations and psychological guidance for employees. Furthermore, Lizhong Group equips the workplace with medical boxes containing adequate first-aid medicines and organizes some employees for first-aider training. Those employees have obtained the first aider certificate.

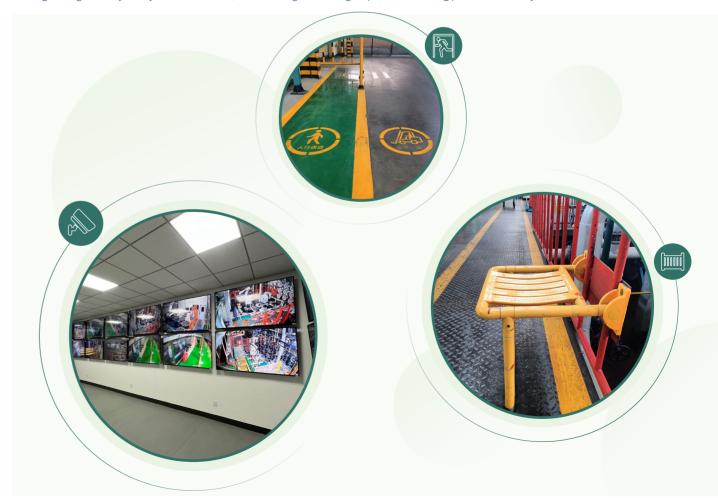
Emergency plan on occupational health and safety

In accordance with laws, regulations and government requirements, Lizhong Group has drafted the Emergency Rescue Plan for Work Safety Accidents and arranges emergency drills for the staff regularly. The drills cover fire fighting, liquid aluminum leakage, heat stroke accidents, intoxication in limited spaces, etc. After participating in the drills, employees have mastered the flow and methods of emergency rescue, with their ability to deal with safety accidents improved.



Safety culture construction

Laying emphasis on standardized and normative safety management, we have made improvements in setting warning signs, safety channels and equipment protection and formed a set of standardized templates that can be quickly copied. We strengthen all employees' awareness and execution of safety standardization by erecting safety visualization signboards and video displays, organizing one-day safety officer activities, and building excellent groups, thus ensuring production safety.



Training on occupational health and work safety

Each segment of Lizhong Group formulates and implements occupational health and safety training and publicity plans every year, compiles training materials and test banks, and organizes safety training for personnel at all levels according to the plan. Safety assessments are used as one of the conditions for cadre appointment, so as to further implement the responsibility system for production safety.

Focusing on the three-level education and training on occupational health and safety, Lizhong Group engages professionals as lecturers to educate new employees, organizes pre-job assessment, and allows only those passing the assessment to start working.

In June of each year, its "work safety month", the Group carries out various kinds of safety promotion and training activities, such as training on occupational disease and heatstroke prevention, online quizzes, and knowledge contests.





The Group reviews and standardizes safety training materials for employees at regular intervals and organizes professionals to improve those materials and training activities. Meanwhile, the Group distributes work safety information to employees through the training platform, bulletin boards, multi-media facilities, and WeChat, diversifying the modes of training on occupational health and work safety.

Contribution to Community Development

Lizhong Group always takes social welfare activities as a corporate responsibility. The Group takes the initiative to donate to education, rural revitalization and community support. As of December 31, 2023, the Group had donated funds and supplies totaling over RMB 345,900 to those causes and for flood disaster relief.

With the aim to promote the employment of disabled people, we now have more than 200 disabled employees. We take an active part in public welfare activities, care about disabled people, and work hard to facilitate the career development of disabled people. Due to our contribution to disabled people, we were awarded the title "Caring Enterprise of Hebei Province".



Case

Volunteer activity: The Group hosted the 13th "Disabled Persons' Fitness Week" in Qingyuan District, Baoding City

Entrusted by the Disabled Persons' Federation of Qingyuan District, Baoding City, we held the 13th "Disabled Persons' Fitness Week" in Qingyuan District on August 18. The theme of this activity is "Welcoming Asian Para Games, Striving for a New Journey". We set up competitions of table tennis, badminton, tug-of-war, and chess as well as fun competitions for this activity. The participants are mainly employees with disabilities, fully embodying the concept of "equality, participation, and sharing" for the development of people with disabilities. The Fitness Week has enriched the lives of disabled employees and promoted their physical and mental health. In the tense but joyful atmosphere, each participant enjoyed the joy of victory and rich prizes, which fully demonstrated the optimistic spirit of disabled employees.



Public benefit activities

Xintai Wheel Manufacturing Co., Ltd.

- In 2023, Xintai Wheel donated scholarships and educational equipment totaling 60,000 baht to the elementary school where the company is located and sponsored 10,000 baht for the Children's Day activities.
- Xintai Wheel provided living materials worth 40,000 baht to help local residents with difficulties. To facilitate local green development, Xintai Wheel participated in tree planting activities organized by the park and donated 3,000 saplings.

Baoding Lizhong Wheel Manufacturing Co., Ltd.

• In 2023, Baoding Lizhong Wheel Manufacturing Co., Ltd. donated RMB 100,000 to support flood relief and facilitate recovery and reconstruction work in the disaster area.



Donation by Xintai Wheel



Sapling donation by Xintai Wheel

Appendix

About This Report

This report is the second Environmental, Social and Governance (ESG) report published by Lizhong Sitong Light Alloys Group Co., Ltd. (hereinafter referred to as the "Group", "we", or "us") to stakeholders.

Report Scope and Boundaries

The disclosure scope of this report is consistent with that of the 2023 annual financial statement of the Group, and some of the information disclosed may be information on policies and practices of previous years.

Data of This Report

Data sources of this report include data published by government agencies and the original operation data, annual financial data, internal statistics, etc., of the Group. The financial data in this report are in renminbi. In case of any inconsistency with the financial statement, the financial statement shall prevail.

Reliability Assurance

This report is free from false records, misleading statements and material omissions, and we are responsible for the authenticity, accuracy and completeness of its content.

Preparation Basis

Global Reporting Initiative (GRI) Standards ISO 26000: 2010: Guidance on Social Responsibilities CASS-ESG 5.0

Guidelines on Corporate Social Responsibilities of Listed Companies on the Shenzhen Stock Exchange

Preparation Process

Based on the ESG practices of the Group, this report was prepared step-by-step from feasibility survey, information collection, preparation and revision to examination by the management and the Board of Directors and public release. During the feasibility approval, preparation and revision, we exchanged ideas with stakeholders on the framework and content of this report.

Availability

The report is published in simplified Chinese and English. The electronic version of this report is available on our website (http://www.lizhonggroup.com/), the website of the Shenzhen Stock Exchange (www.szse.cn), and www. cninfo.com.cn.

We will keep improving our report disclosure performance and better perform our CSRs. Please feel free to contact us if you have any questions or advice on this report:

Lizhong Sitong Light Alloys Group Co., Ltd.

Address: No. 359, Fazhan West Street, Qingyuan Telephone: 0312-5997688 Email: info@stnm.com.cn District, Baoding City, Hebei Province

Performance Data

R&D investment RMB 10,000 66,600 74,492 Total assets RMB 10,000 1,694,473 1,872,035 Net profit attributable to parent company (net of equity incentive amortization) RMB 10,000 61,443 70,957 Environmental performance Unit 2022 2023 Investment in environmental protection RMB 10,000 4,216 4,518 Natural gas m³ 166,073,472 150,754,003 Gasoline l 1,449,110 391,548 Diesel l 295,582 4,582,782 Outsourced power kWh 237,443,757 376,424,903 Power generation by solar projects kWh 1,020,000 9,395,325 Total greenhouse gas emissions (scope 1+scope 2) t CO ₂ e 661,130 561,849 Volatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 175.2 283 PM emission t 175.2 283 PM emission t 175.2 283 Value emission <	Economic performance	Unit	2022	2023
RMB 10,000 1,694,473 1,872,035	Operating income	RMB 10,000	2,137,141	2, 336, 486
Net profit attributable to parent company (net of equity incentive amortization) RMB 10,000 61,443 70,957 Environmental performance Unit 2022 2023 Investment in environmental protection RMB 10,000 4,216 4,518 Natural gas m³ 166,073,472 150,754,003 Gasoline l 1,449,110 391,548 Diesel l 295,582 4,582,782 Dutsourced power kWh 237,443,757 376,424,903 Power generation by solar projects kWh 1,020,000 9,395,325 Total greenhouse gas emissions (scope 1 + scope 2) t CO ₂ e 661,130 561,849 Volatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 36.9 83 NOx emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total volume of hazardo	R&D investment	RMB 10,000	66,600	74,492
Environmental performance Unit 2022 2023 Investment in environmental protection RMB 10,000 4,216 4,518 Natural gas Investment in environmental protection RMB 10,000 4,216 4,518 Natural gas Gasoline I 1,449,110 391,548 Diesel I 295,582 4,582,782 Dutsourced power RWH 237,443,757 376,424,903 Power generation by solar projects RWH 1,020,000 9,395,325 Total greenhouse gas emissions (scope 1 + scope 2) Volatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 36.9 83 NOx emission t 175.2 283 PM emission t 175.2 283 PM emission t 175.2 283 PM emission t 175.2 175.4 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total volume of general wastes generated t 13,253.6 12,338 Total volume of general wastes generated Total reclaimed water Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Number of possessed patents Piece 992 1,100	Total assets	RMB 10,000	1,694,473	1,872, 035
Natural gas	Net profit attributable to parent company (net of equity incentive amortization)	RMB 10,000	61,443	70,957
Natural gas m³ 166,073,472 150,754,003 Gasoline I 1,449,110 391,548 Diesel I 295,582 4,582,782 Outsourced power kWh 237,443,757 376,424,903 Power generation by solar projects kWh 1,020,000 9,395,325 Total greenhouse gas emissions (scope 1+scope 2) t CO ₂ e 661,130 561,849 Volatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 36.9 83 NOx emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total reclaimed water m³ 248,499 270,3	Environmental performance	Unit	2022	2023
Gasoline I 1,449,110 391,548 Diesel I 295,582 4,582,782 Dutsourced power kWh 237,443,757 376,424,903 Power generation by solar projects kWh 1,020,000 9,395,325 Total greenhouse gas emissions (scope 1 + scope 2) t CO2e 661,130 561,849 Wolatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 36.9 83 NOX emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Investment in environmental protection	RMB 10,000	4,216	4,518
Diesel I 295,582 4,582,782 Outsourced power	Natural gas	m³	166,073,472	150,754,003
Dutsourced power kWh 237,443,757 376,424,903 Power generation by solar projects kWh 1,020,000 9,395,325 Total greenhouse gas emissions (scope 1 + scope 2) t CO₂e 661,130 561,849 Volatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 36.9 83 NOx emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total volume of general wastes generated t 13,253.6 12,339 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000	Gasoline	l	1,449,110	391,548
Power generation by solar projects kWh 1,020,000 9,395,325 Total greenhouse gas emissions (scope 1 + scope 2) t CO₂e 661,130 561,849 Volatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 36.9 83 NOx emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total valume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total volume of general wastes generated t 13,253.6 12,338 Total reclaimed water m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D investment <t< td=""><td>Diesel</td><td>l</td><td>295,582</td><td>4,582,782</td></t<>	Diesel	l	295,582	4,582,782
Total greenhouse gas emissions (scope 1 + scope 2) t CO₂e 661,130 561,849 Volatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 36.9 83 NOx emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12%	Outsourced power	kWh	237,443,757	376,424,903
Volatile organic compounds (VOCs) t 15.4 17.5 Sulfide emission t 36.9 83 NOx emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Power generation by solar projects	kWh	1,020,000	9,395,325
Sulfide emission t 36.9 83 NOx emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total vater intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Total greenhouse gas emissions (scope 1 + scope 2)	t CO ₂ e	661,130	561,849
NOx emission t 175.2 283 PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Volatile organic compounds (VOCs)	t	15.4	17.5
PM emission t 55.6 73 Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Sulfide emission	t	36.9	83
Wastewater discharge m³ 598,769.7 796,247 Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	NOx emission	t	175.2	283
Total Chemical Oxygen Demand (COD) t 24.2 15.649 Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Proportion of R&D personnel Person 1,843 2,054 Proportion of P&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	PM emission	t	55.6	73
Total ammonia nitrogen t 1.3 1.557 Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Wastewater discharge	m³	598,769.7	796,247
Total volume of hazardous wastes t 21,133.5 38,979 Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Total Chemical Oxygen Demand (COD)	t	24.2	15.649
Total volume of general wastes generated t 13,253.6 12,338 Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Total ammonia nitrogen	t	1.3	1.557
Total water intake m³ 925,824.6 1,892,716 Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Total volume of hazardous wastes	t	21,133.5	38,979
Total reclaimed water m³ 248,499 270,399 Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Total volume of general wastes generated	t	13,253.6	12,338
Social performance Unit 2022 2023 R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Total water intake	m³	925,824.6	1,892,716
R&D investment RMB 10,000 66,600 74,492.63 Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Total reclaimed water	m ³	248,499	270,399
Number of R&D personnel Person 1,843 2,054 Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	Social performance	Unit	2022	2023
Proportion of R&D investment % 3.12% 3.19% Number of possessed patents Piece 992 1,100	R&D investment	RMB 10,000	66,600	74,492.63
Number of possessed patents Piece 992 1,100	Number of R&D personnel	Person	1,843	2,054
	Proportion of R&D investment	%	3.12%	3.19%
Total investment in work safety RMB 10,000 8,057 6,516.98	Number of possessed patents	Piece	992	1,100
	Total investment in work safety	RMB 10,000	8,057	6,516.98

Social performance	Unit	2022	2023
Coverage of occupational health examination	%	100%	100%
Employees with occupational diseases	Person	0	0
Deaths due to work-related injuries	Person	0	0
Number of suppliers	Person	1,327	2,282
Number of domestic suppliers	/	1,304	2,133
Number of overseas suppliers	/	23	149
Suppliers signing provisions on environmental and labor requirements	/	565	1,261
Result of customer satisfaction survey	%	99%	99%
Total employees	Person	10,588	11,960
Male employees	Person	8,458	9,786
Female employees	Person	2,130	2,174
Employees aged 51 and above	Person	549	658
Employees aged 30-50	Person	6,313	7,108
Employees aged below 30	Person	3,726	4,194
Employees with a master's degree or above	Person	111	128
Employees with a junior college or undergraduate diploma	Person	3,273	4,108
Employees with a vocational school, high school diploma or below	Person	7,204	7,724
Total number of low-level managers	Person	10,112	11,455
Total number of middle-level managers	Person	312	364
Number of female employees among middle- level managers	Person	64	75
Total number of senior managers	Person	164	141
Number of female employees among senior managers	Person	21	21
Total number of employees trained	Person	10,588	11960
Total duration of employee training	Hour	88,584	124,478
Average duration of employee training	Hour	8	10
Total hours of male employee training	Hour	66,571	100,002
Total hours of female employee training	Hour	22,013	24,476
Total hours of grassroots employee training	Hour	73,892	110,853
Total hours of middle management training	Hour	10,342	10,576
Total hours of senior management training	Hour	4,350	3,049
Total number of separated employees	Person	1,992	2,200
Employee turnover rate	%	18.81%	18.39%
Number of employees volunteering	Person	134	508
Total amount donated	RMB 10,000	300	34.95

GRI Standards

Description
GRI 1 used

Lizhong Sitong Light Alloys Group Co., Ltd. reported the information referenced in this GRI Standards from January 1, 2023 to December 31, 2023 by reference to the GRI Standards. GRI1: Foundation 2021

GRI standard		Items disclosed	Chapter	
	2-1	Organizational details	About Lizhong	
	2-3	Reporting period, frequency and contact point	Appendix	
	2-7	Employees	Harmonious Workplace Creating a Sense of Belonging	
GRI 2: General	2-9	Governance structure and composition	Efficient Governance Stable Operations	
Disclosures 2021	2-12	Role of the highest governance body in overseeing the management of impacts	Efficient Governance Stable Operations	
	2-14	Role of the highest governance body in sustainability reporting	Efficient Governance Stable Operations	
	2-22	Statement on sustainable development strategy	Lizhong Group's Sustainability Management	
	2-29	Approach to stakeholder engagement	Lizhong Group's Sustainability Management	
	3-1	Process to determine material topics	Lizhong Group's Sustainability Management	
GRI 3: Material Topics 2021	3-2	List of material topics	Lizhong Group's Sustainability Management	
	3-3	Management of material topics	Lizhong Group's Sustainability Management	
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	About Lizhong Group	
GRI 205: Anti- corruption 2016	205-2	Communication and training about anti- corruption policies and procedures	Efficient Governance Stable Operations	
GRI 301: Energy 2016	302-1	Energy consumption within the organization	Prioritizing Digital Intelligence for Lean and Low-carbon Development	
	303-1	Interactions with water as a shared resource	Prioritizing Digital Intelligence for Lean and Low-carbon Development	
GRI 303: Water and Effluents 2018	303-2	Management of water discharge-related impacts	Prioritizing Digital Intelligence for Lean and Low-carbon Development	
	303-3	Water withdrawal	Prioritizing Digital Intelligence for Lean and Low-carbon Development	

GRI standard		Items disclosed	Chapter
	306-1	Waste generation and significant waste-related impacts	Compliance Operation Green and Sustainable Development
GRI 306: Waste 2020	306-2	Management of significant waste-related impacts	Compliance Operation Green and Sustainable Development
	306-3	Waste generated	Compliance Operation Green and Sustainable Development
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Focusing on Customer Needs Pursuing Customer Satisfaction
	401-1	New employee hires and employee turnover	Performance Data
GRI 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Harmonious Workplace Creating a Sense of Belonging
	403-1	Occupational health and safety management system	Harmonious Workplace Creating a Sense of Belonging
	403-3	Occupational health services	Harmonious Workplace Creating a Sense of Belonging
	403-4	Worker participation, consultation, and communication on occupational health and safety	Harmonious Workplace Creating a Sense of Belonging
GRI 403: Occupational Health and Safety 2018	403-5	Worker training on occupational health and safety	Harmonious Workplace Creating a Sense of Belonging
2010	403-6	Promotion of worker health	Harmonious Workplace Creating a Sense of Belonging
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Harmonious Workplace Creating a Sense of Belonging
	403-10 Wo	Work-related ill health	Harmonious Workplace Creating a Sense of Belonging
	404-1	Average hours of training per year per employee	Performance Data
GRI 404: Training and Education 2016 404-		Programs for upgrading employee skills and transition assistance programs	Harmonious Workplace Creating a Sense of Belonging
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Harmonious Workplace Creating a Sense of Belonging
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	Harmonious Workplace Creating a Sense of Belonging

Feedback Form

This report is the second Environmental, Social and Governance (ESG) report published by Lizhong Group to the public. To continuously strengthen our ESG management and improve our ability and performance of fulfilling ESG responsibilities, we are looking forward to your opinions and suggestions.

Please answer the relevant questions in the feedback form and return it to us in one of the following ways.

1. What do you think of the report as a whole?							
☐ Excellent	Good	☐ Average	☐ Not good	Poor			
2. Do you think this report fully and accurately reflects the Group's significant impact on the corporate governance, society and environment?							
☐ Excellent	☐ Good	☐ Average	☐ Not good	☐ Poor			
3. What do you think response to and disc		•	erms of				
☐ Excellent	Good	☐ Average	☐ Not good	Poor			
	4. What do you think of this report in terms of the clarity, accuracy and completeness of information, indicators, and data?						
Excellent	☐ Good	☐ Average	☐ Not good	☐ Poor			
5. What do you think of the readability of this report, namely the logicality, content arrangement, wording and layout?							
☐ Excellent	☐ Good	☐ Average	☐ Not good	☐ Poor			
Open-ended questions:							
What are the most satisfying aspects of this report?							
Any suggestions for o	our future ESG rep	ports?					

Advanced production processes and technologies havebeen used to achieve the recycling of renewable resources, to continuously pursue the goal of green development, and to contribute to achieving carbon peaking and carbonneutralization