



# 2024

## Environmental, Social and Governance (ESG) Report

Ningbo Shanshan Co., Ltd.

# This Report

This Report is the 16th ESG report released by Ningbo Shanshan Co., Ltd. to its stakeholders. This Report discloses in detail the practices and performance of Ningbo Shanshan Co., Ltd. in fulfilling its responsibilities in the fields of economy, environment, social and corporate governance in 2024. It aims to communicate effectively with various stakeholders and systematically respond to the expectations and requirements of stakeholders.

## Period

The period covered by this Report is from January 1, 2024 to December 31, 2024. In order to enhance the comparability and forward-looking nature of this Report, some contents are appropriately extended to the previous and subsequent years.

## Scope of Disclosure

This Report discloses information and typical cases on the performance of economic, environmental, social and corporate governance responsibilities by Ningbo Shanshan Co., Ltd. and companies directly under it.

## References

Ningbo Shanshan Co., Ltd. (referred to as "Shanshan", "the Company" or "we")  
Shanghai Shanshan Lithium Battery Material Technology Co., Ltd. and its subsidiaries (referred to as "Shanshan Anode" or "Anode")  
Shanjin Optoelectronics (Suzhou) Co., Ltd. and its subsidiaries (referred to as "Shanjin Optoelectronics" or "Shanjin")

## Sources of Information

The information disclosed in this Report is derived from Shanshan's internal official documents, statistical reports and annual reports.

The data disclosed in this Report are derived from the original data of Shanshan's actual operation, public data from government departments, annual financial data, relevant internal statistical statements, third-party questionnaires, third-party evaluation interviews, etc. The financial data in this Report is in RMB, subject to the financial report of the joint-stock company.

## Preparation Basis

United Nations 2030 Sustainable Development Goals (SDGs)  
Global Sustainability Standards Board's GRI Sustainability Reporting Standards (GRI Standards)  
China National Standards - Guidance on Social Responsibility Reporting (GB/T36001-2015)  
ISO 26000: Guidance on Social Responsibility (2010) of International Organization for Standardization  
Guidelines No.14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies - Sustainability Report

## Report Access

This Report is available in electronic form. You can visit the Company's official website at <http://www.ssgf.net/> or the website of the Shanghai Stock Exchange at [www.sse.com.cn](http://www.sse.com.cn) to read the electronic version of this Report. In case of any questions or suggestions about this Report, please send an email to [ssgf@shanshan.com](mailto:ssgf@shanshan.com) or call 0574-88208337

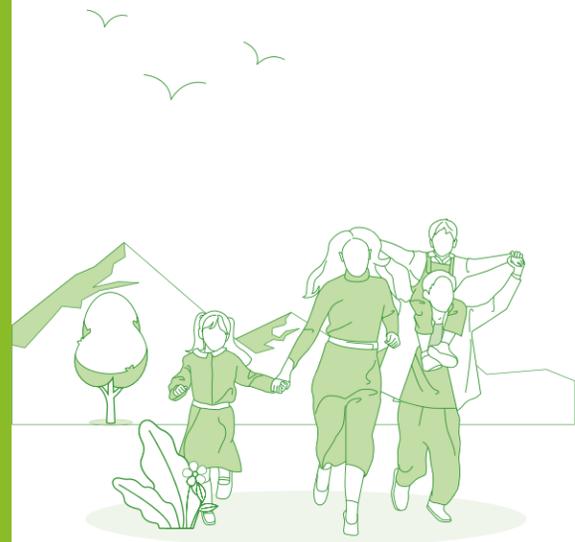
# Contents

## Introduction

Message from Chairman of Shanshan	01
Shanshan in 2024	03
Our sustainable development approach	09

## Summary

Key Performance Indicators	103
Benchmarking	106
Reader Feedback	111



## Lean Management and Solid Foundation 01

Strengthen Corporate Governance	19
Protection of Investor Rights and Interests	22
Internal Control and Risk Management	23
Compliance with Business Ethics	27
Protect Information Security	30

## Develop Technology and Innovation 03

Develop Innovation and R&D	57
Strict Quality Management	60
Respond to Customer Needs	65

## Investing in Talents and Advancing as One 05

Employment, rights and interests of employees	77
Employee Development and Training	83
Employee Care and Activities	89
Occupational Health and Safety	92

## Protect Nature, Green and Low Carbon 02

Environmental Compliance Management	35
Response to Climate Change	37
Efficient Resource Utilization	45
Chemical Safety Management	51
Advocate Green Operations	53

## Collaboration for Co-existence and Mutual Benefit 04

Supply Chain ESG Management	69
Promote Industry Development	72

## Uphold the Mission and Shoulder Responsibilities 06

Social Welfare	99
Rural Revitalization	101
Party-Building Leadership	102

## Message from Chairman of Shanshan

In 2024, the global new energy industry accelerated its integration in the midst of change, and the wave of the iteration and localization of new display technology continued to advance, with China's core position in the global industrial chain further highlighted. In the face of complex and ever-changing external environment and cyclical fluctuations in the industry, Shanshan has always adhered to the firm strategic resolve of "focusing on the main business and innovation-driven", consolidated its core competitiveness with technological breakthroughs, responded to market challenges with operational resilience, and continued to consolidate its position as a global leading company in the two core fields of anode materials and polarizers. It has continued to empower the development of strategic emerging industries such as new energy and new displays, and is committed to creating long-term value for shareholders, customers and society.

With the corporate vision of "building a respected global high-tech enterprise and realizing sustainable and high-quality development", Shanshan is committed to achieving a balance between economic benefits and environmental protection. The Company takes "compliance with laws and regulations, pollution prevention, people-oriented, and continuous improvement" as its EHS policy, and continues to promote the systematization, standardization, and scientificization of EHS management to ensure environmental compliance management; the Company adheres to the strategic policy of promoting greenhouse gas emission reduction through energy management, continuously improves its own carbon footprint management system, and cooperate with upstream and downstream partners to build a low-

carbon value chain; the Company continues to improve the green operation system, and strengthens the environmental protection awareness of all employees through systematic energy-saving measures, contributing Shanshan's strength to the low-carbon transformation.

Scientific and efficient corporate governance is the cornerstone for Shanshan to achieve sustainable development. The Company strictly abides by the requirements of laws and regulations to formulate and continuously improve the modern corporate governance system and continuously improve the level of corporate governance; the Company regards law-abiding and compliant operations as the lifeline of corporate development, advocates honest practice and fair competition, continuously improves the information security system, and takes multiple measures simultaneously to promote the construction of business ethics, laying a solid moral foundation for the Company's development, and contributing to the healthy development of the industry ecology.

Scientific and technological innovation is the core driving force of Shanshan. The Company attaches great importance to technological research and development and intellectual property management, and adheres to the bottom line of scientific and technological ethics to ensure that technological innovation and social responsibility are given equal weight. At the same time, the Company fully implements international quality management system standards to ensure that it has consistently been at the industry-leading level in terms of products and services, and continuously improves product quality and customer

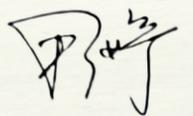
satisfaction. In 2024, Shanjin Optoelectronics Nanjing Laboratory and Shanshan Anode Analysis and Testing Center successfully obtained CNAS accreditation and the International Mutual Recognition Joint Accreditation Mark, and it obtained the SGS Green Mark Certification for its independently developed "Eco-Friendly Polarizer" product, achieving a major breakthrough in the field of environmental protection science and technology.

Human capital is one of the core elements of sustainable development. Shanshan adheres to the "people-oriented" concept, builds an all-round growth platform to empower employees' career development and continuously optimizes the salary and benefits system, and deeply integrates the talent strategy into the Company's high-quality development process. In addition, the Company always bears in mind its social responsibilities and missions, adheres to the leadership of Party building and actively participates in social welfare and rural revitalization activities, and continues to contribute to the harmonious development of society.

Shanshan has always adhered to the cooperation concept of symbiosis and win-win situation in the industrial chain, and has established an ESG governance system covering the entire life cycle of the supply chain. It systematically integrates the Sunshine Procurement Guidelines and Sustainable Procurement Standards and strictly implements conflict mineral control. It empowers procurement transparency with digitalization, and jointly practices social responsibility with partners to promote the coordinated development and value sharing of the industrial chain. In addition,

the Company actively builds an all-round strategic cooperation ecological network, actively carries out school-enterprise cooperation, participates in the compilation of industry standards to promote the standardization of the industrial chain and industry development, and takes the initiative to participate in major international exchange activities, striving to build a global leader in the two major market segments of lithium battery anode materials and polarizers with practical actions.

Based on the wave of global energy transformation and the deep integration of digital technology, Shanshan continues to deepen the development in its core fields of new energy and new display. Looking to the future, the Company will take innovation as an engine to deepen its global layout, join hands with upstream and downstream partners in the industrial chain to build a low-carbon ecosystem, and accelerate the promotion of industry technology upgrades and zero-carbon transformation, demonstrating corporate responsibility in the global carbon neutrality process, and sharing new opportunities for sustainable development under the empowerment of science and technology with all parties.



Chairman of Ningbo Shanshan Co., Ltd.

# Shanshan in 2024

## Shanshan

Ningbo Shanshan Co., Ltd. (A-share code: 600884) is listed on the Main Board as A-shares of Shanghai Stock Exchange. Shanshan was founded in Ningbo, Zhejiang in 1989. The Company started with apparel business. In 1999, the Company transformed into the field of lithium battery materials, and became the first industrialized anode material company in China. After more than 20 years of development, the Company has become the global leader in anode materials. In 2021, the Company acquired LG Chem's polarizer business, becoming the global leader in polarizer business, the extremely valuable "golden track", and forming a new development pattern of "dual primary business, dual drives". In recent years, the Company has continued to implement its focus strategy and has made every effort to develop its two core dominant business, lithium battery anode materials and polarizers, forming a business pattern of "lithium battery anode materials + polarizers" dual technology engines and dual development powers.

The Company has thoroughly implemented the national science and technology innovation strategy, focusing on its dual core businesses of lithium battery anode materials and polarizer films, while continuously empowering the development of strategic emerging industries such as new energy and new displays. The Company has consistently adhered to the customer-centric principle, deepened the dual-wheel drive strategy of technological innovation and cost leadership, strengthened R&D investment, improved intelligent manufacturing level, and optimized operational efficiency, to consolidate the global industry leadership and continuously enhance mid- and long-term profitability.

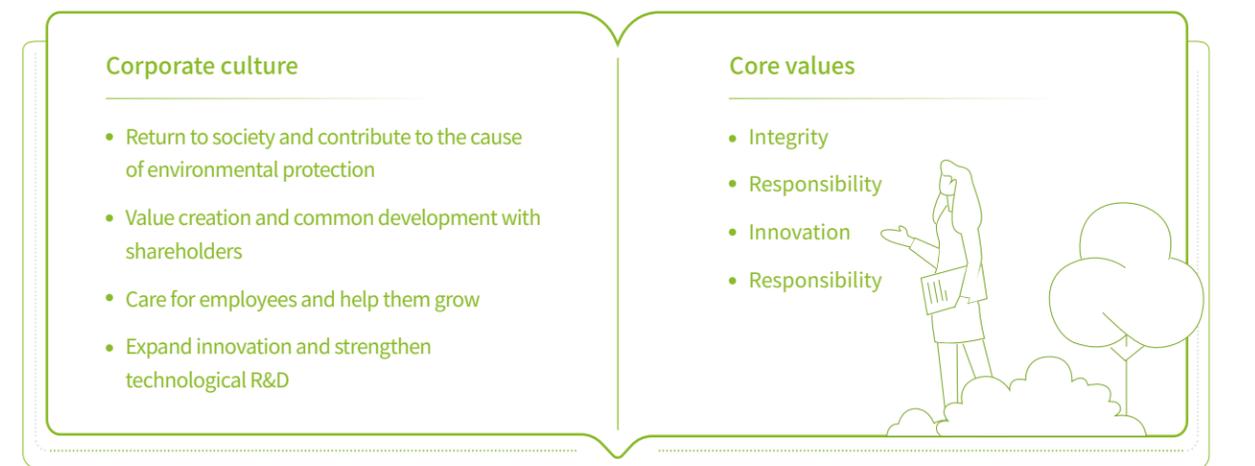


## Business Layout

The Company has established a strategic framework for synergistic development of its dual core businesses of lithium battery anode materials and polarizer films. As a pioneer in China's artificial graphite anode material industry for lithium-ion batteries, the Company has dedicated over two decades to the industry, building a globally leading R&D and production system that maintains its dominant position as the industry leader in artificial graphite anode materials. In 2021, the Company strategically acquired LG Chem's LCD polarizer film business to become the global leader in polarizer film industry, thereby creating a new dual-core business development model. Amid the global wave of electrification and digitalization, the Company continued to strengthen its technological barriers and enhance core competitiveness to achieve stable and sustainable growth.



## Culture and Values



## Major Events in 2024

### January

- Phase I of Yunnan Shanshan's 300,000-ton anode material integrated project was officially put into operation
- The main structure of Shanjin Optoelectronics' Mianyang project with an annual output of 50 million square meters of new display polarizers was fully completed

- Shanjin Optoelectronics won the LG Display Best Partner Award
- Signed a strategic cooperation agreement with China Construction Bank Ningbo Branch

### March

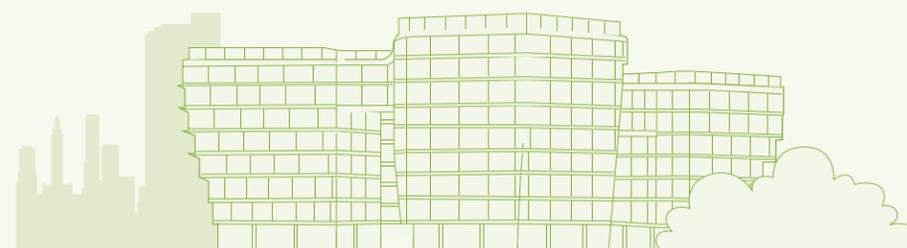
- Shanjin Optoelectronics won the BOE Global Supplier Outstanding Strategic Partner Award

### May

- Shanjin Optoelectronics (Nanjing) Polarizer Material Global R&D Center and Production Line Upgrade and Expansion Project was officially contracted

### June

- Shanshan Technology was invited to attend the Sustainable Battery Value Chain Reception in Finland, and General Manager Ding Xiaoyang delivered a speech
- Shanjin Optoelectronics participated in the China (Jiangsu)-Korea Economic and Trade Cooperation Exchange Conference, and President Zhu Zhiyong spoke as a representative of Jiangsu enterprises



### December

- According to data released by ICCSINO, the Company's market share of artificial graphite anode materials continuously ranked first in 2024

### November

- Shanjin Optoelectronics attended the C-TOUCH & DISPLAY 2024 and won the 2024 Display Touch Industry Excellence Award

### October

- Shanghai Shanshan Technology's new headquarters in Lingang officially opened

### September

- Shanjin Guangzhou won the honor of national specialized and sophisticated "Little Giant" enterprise

### August

- Shanjin Optoelectronics Nanjing Factory won the "SGS Green Mark" - ENVIRONMENTAL

### July

- Sichuan Shanshan won the title of "Green Factory" and "Zero Waste Enterprise"
- Ningbo Shanshan Silicon won the title of Advanced Collective in the Zhejiang Province 2022-2023 Contest for Loyally Implementing the "Eight-Eight Strategy" and Striving to Build an "Important Window", and was commended by the Provincial Government

- Shanjin Optoelectronics participated in the DIC EXPO and won the Display Material Innovation Gold Award and many other awards
- Shanshan ranked 28th on the Hurun China Most Valuable New Material Companies 2024, and Shanshan Lithium Battery ranked 9th on the Hurun China Renewable Energy Companies with Potential 2024



## Honors in 2024

### Shanshan



Honor	Awarding agency
<b>Corporate contribution</b>	
Listed in the "Top 500 Chinese Enterprises"	China Enterprise Confederation, China Enterprise Directors Association
Won the title of "Top 100 Shanghai Enterprises of 2024"	Shanghai Enterprise Confederation, Shanghai Enterprise Directors Association, Shanghai Federation of Economics Organizations, Jiefang Daily
Listed in the Hurun China Most Valuable New Material Companies 2024	Hurun Research Institute
<b>ESG</b>	
Listed in the "100 Classic ESG Cases of Global Zhejiang Enterprises in 2024"	2024 ESG Conference of Global Zhejiang Enterprises
Won the title of "2024 ESG Outstanding Zhejiang Enterprise"	2024 ESG Conference of Global Zhejiang Enterprises

### Shanjin Optoelectronics



Honor	Awarding agency
<b>Corporate contribution</b>	
Won the title of "Leading Private Enterprise"	Guangzhou Development Zone
<b>R&amp;D and innovation</b>	
Selected as a specialized and sophisticated "Little Giant" enterprise	Ministry of Industry and Information Technology
Won the 2024 Excellence Award in Display Touch Industry	C-Touch & Display
2023 China New Display Industry Chain Contribution Award - Innovation Breakthrough Award	China Electronics Materials Industry Association, China Optics and Optoelectronics Manufacturers Association Liquid Crystal Branch
2023 China New Display Industry Chain Contribution Award - Outstanding Contribution Award	China Electronics Materials Industry Association, China Optics and Optoelectronics Manufacturers Association Liquid Crystal Branch
2023 China New Display Industry Chain Contribution Award - Collaborative Development Award	China Electronics Materials Industry Association, China Optics and Optoelectronics Manufacturers Association Liquid Crystal Branch
2024 DIC Award - Display Material Innovation Gold Award	DIC Expo Organizing Committee, DIC Forum Organizing Committee
2024 DIC Award - Display Material Innovation Silver Award	DIC Expo Organizing Committee, DIC Forum Organizing Committee

### Shanshan Anode



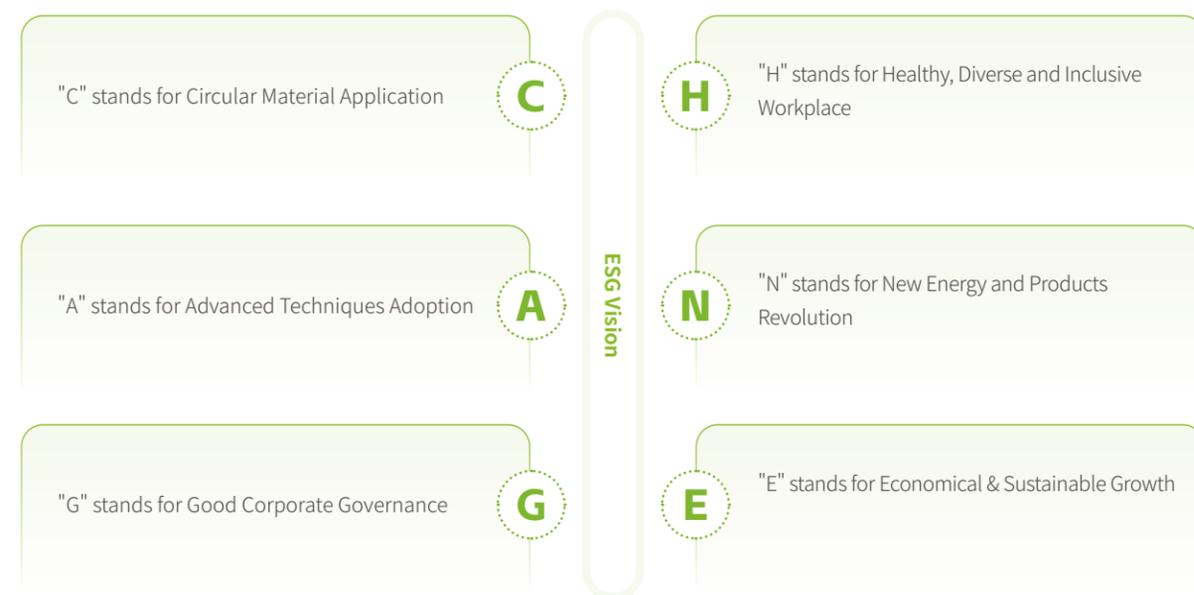
Honor	Awarding agency
<b>ESG</b>	
Shanshan Technology was honored as a member of Carbon Neutrality Committee of China Energy Conservation Association	Carbon Neutrality Committee of China Energy Conservation Association
<b>Industry</b>	
Shanshan Technology was honored as one of the Top 10 suppliers in terms of anode material shipments in China at the 9th New Energy Expo for 2024	Shanghai Metals Market Information Technology Co., Ltd.
Hurun China Renewable Energy Companies with Potential 2024 - Shanshan Lithium Battery	Hurun Report
Shanshan Technology won the 2024 Most Valuable Brand Award in the lithium battery anode materials Industry	ICC
Shanshan Technology was awarded the title of High Quality Enterprise in China's New Energy Industry for 2024	ICC
<b>Corporate contribution</b>	
2024 Influential Enterprise (Materials) Medal	China Battery Enterprise Alliance, 9th International Summit on Power Battery Application
2024 Innovative Enterprise (Materials) Medal	China Battery Enterprise Alliance, 9th International Summit on Power Battery Application
2024 Shanghai Key Service Unicorn Enterprise	Greatwall Strategy Consultants, Shanghai Small and Medium Enterprise Development Co., Ltd.
<b>R&amp;D and innovation</b>	
Selected as a national specialized and sophisticated "Little Giant" enterprise	Ministry of Industry and Information Technology of China
High-tech Enterprise - Shanshan Technology	Science and Technology Commission of Shanghai Municipality
New Materials - 2024 Lithium Battery Materials Innovation Enterprise Honorary Certificate	GGII

# Our sustainable development approach

## ESG management system

### Shanshan Anode

In combination with its development strategy planning, Shanshan Anode set the vision and goal of "promoting the new energy revolution with new materials, new processes and new management" (We CHANGE), and broke it down into "CHANGE". Shanshan Anode proposed that sustainable development cannot be separated from the basic support of digital and information-based management, and that digital transformation will enhance the basic driving force for the company's overall management and help the sustainable development proceed in an orderly manner.



Shanshan Anode established a three-level ESG working mechanism including "decision-making level - management level - execution level". The Sustainable Development (ESG) Committee is the highest decision-making authority for ESG management of Shanshan Anode, and reports the effectiveness of ESG management to the Board of Directors on a regular basis; the management level is led by the ESG Department and the Board of Directors Office; special groups for key issues are established to cooperate with the persons in charge of business functions and general managers of plants in promoting the implementation of ESG horizontally and vertically.



Organizational Structure for ESG Management of Shanshan Anode

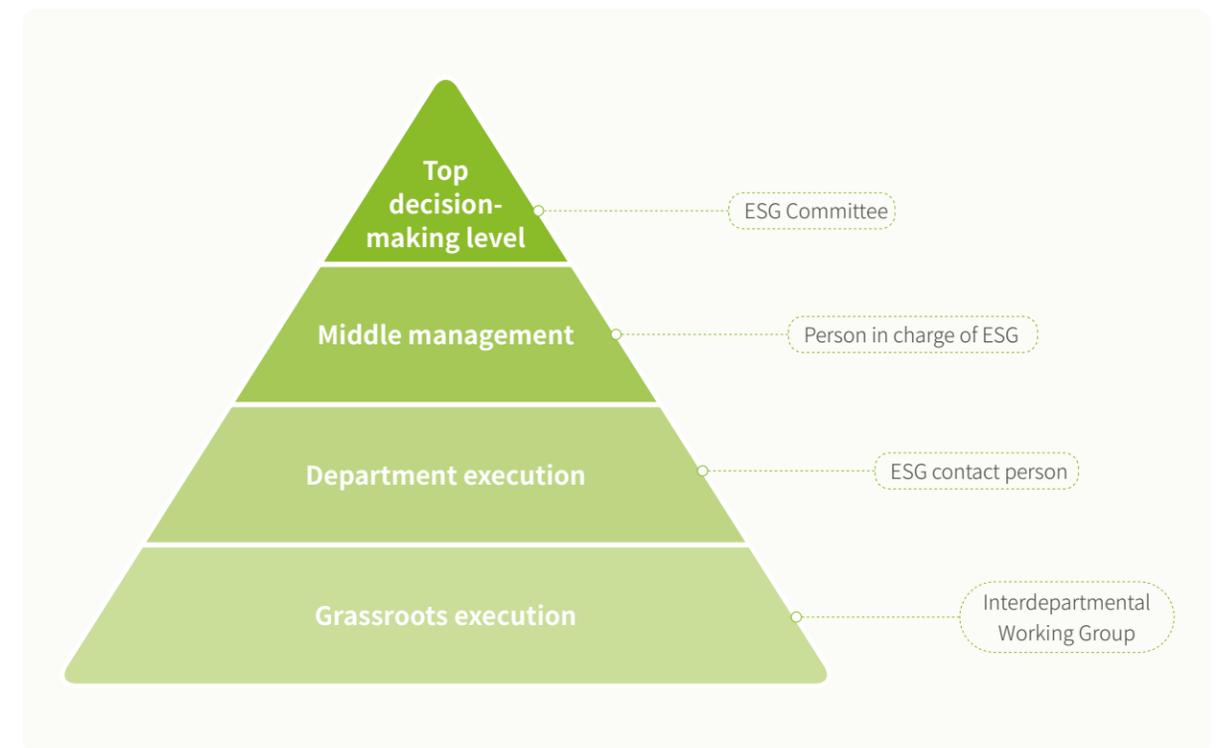
## Shanjin Optoelectronics

Shanjin Optoelectronics regarded ESG as an important part of its long-term development strategy. In combination with its own industry characteristics, business models and long-term development goals, it formulated a specific ESG action plan, set specific and measurable ESG goals and incorporated them into the performance appraisal system, such as reducing carbon emissions, enhancing energy efficiency, and improving employee welfare, etc.; it also established an incentive mechanism linked to ESG performance, rewarding and commending departments and individuals with outstanding performance in ESG, to ensure the effective implementation of ESG.



Strategic Direction of Sustainable Development of Shanjin Optoelectronics

Shanjin Optoelectronics established a dedicated ESG management structure to coordinate close collaboration among departments in promoting ESG level by level from top decision making to grassroots execution, to ensure the comprehensive implementation of the ESG concept within the company.

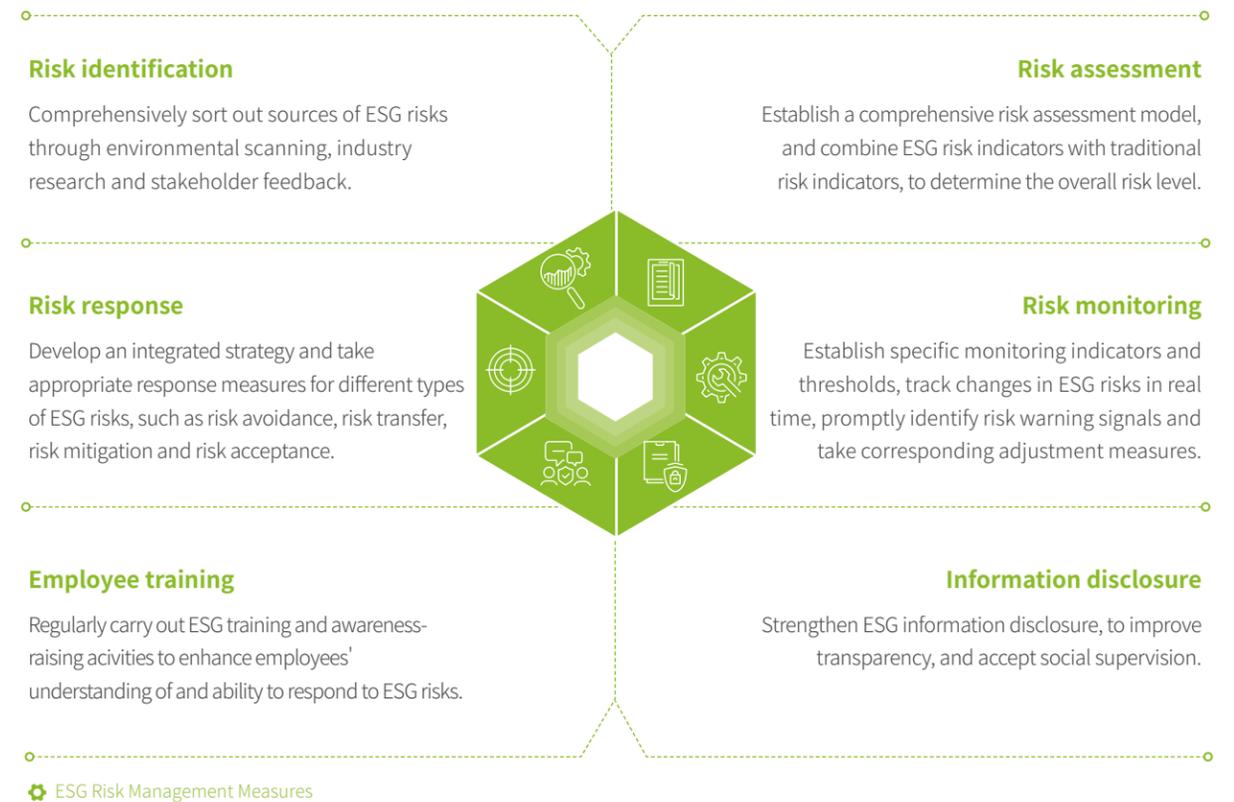


ESG Management Structure of Shanjin Optoelectronics

### ESG Due Diligence

The Company further improved its ESG risk control and identified negative impacts or risks related to sustainable development through due diligence. Shanjin Optoelectronics formulated the strategic policy for ESG risk management, regularly identified and assessed ESG risks, monitored ESG risk status, established a cross-departmental collaboration mechanism, and strengthened ESG risk management, to ensure the formulation and effective implementation of ESG risk response measures.

Risk category		Risk description
Environmental risks	Climate change	Extreme weather events may have an impact on the Company's production facilities, such as production disruptions caused by natural disasters.
	Resource depletion	As resource consumption increases, the shortage of raw material supplies may occur, leading to higher costs or production disruptions.
	Environmental pollution	Emissions from the production process may have an impact on the environment and surrounding communities, triggering the attention and penalties of regulatory authorities.
Social risks	Risks related to employee rights and interests	Labor disputes and employee health and safety issues may affect the Company's operation and reputation.
	Product quality and safety risks	Product defects or safety issues may result in customer losses, leading to legal proceedings and compensation.
Governance risks	Compliance risks	Violation of ESG-related laws and policies may result in legal proceedings and regulatory penalties.



## Communication with Stakeholders

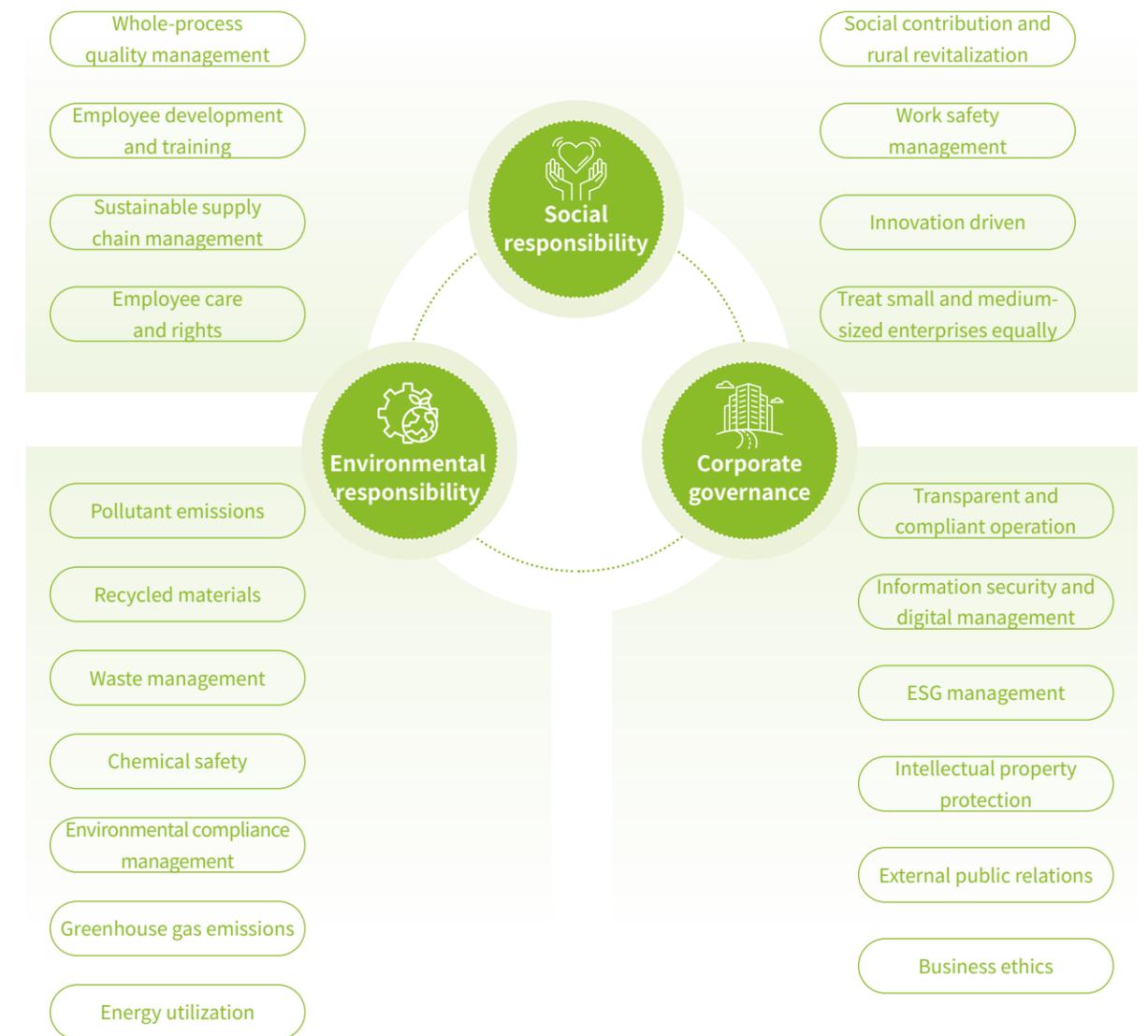
According to the characteristics of the industry and operations, the Company identified the main stakeholders, including shareholders and investors, client, partners, employees, government, community and the public, established a mechanism of regular communication with stakeholders through channels and methods such as websites, media, meetings, reports, and activities, and actively responded to the demands and expectations of stakeholders.

Stakeholder	Concern and expectation	Communication mechanism and form
 <b>Shareholders and investors</b>	<ul style="list-style-type: none"> <li>Open and transparent information disclosure</li> <li>Standardize corporate governance</li> <li>Asset preservation and appreciation and investment returns</li> </ul>	<ul style="list-style-type: none"> <li>Convene the general meeting</li> <li>Regular reports, interim reports</li> <li>Institutional research, investor hotline, email, performance briefing, SSE Infonet</li> </ul>
 <b>Clients</b>	<ul style="list-style-type: none"> <li>Safe and high-quality products</li> <li>Improving service quality</li> <li>Exceeding customer expectations</li> </ul>	<ul style="list-style-type: none"> <li>Customer satisfaction survey</li> <li>After-sales service commitment</li> <li>Establishing customer communication channels</li> <li>Carrying out quality service activities</li> </ul>
 <b>Partners</b>	<ul style="list-style-type: none"> <li>Mutual benefit and win-win results</li> <li>Standardization of market operations</li> <li>Complying with business ethics and laws and regulations together</li> </ul>	<ul style="list-style-type: none"> <li>Contract negotiation</li> <li>Field visit</li> <li>Training guidance</li> <li>Regular evaluation</li> </ul>
 <b>Employees</b>	<ul style="list-style-type: none"> <li>Reasonable compensation system</li> <li>Harmonious working atmosphere</li> <li>Good career development space</li> <li>Personal value affirmation and enhancement</li> </ul>	<ul style="list-style-type: none"> <li>Company website and publications</li> <li>Employee mailbox</li> <li>Seminars, employees' congress</li> <li>Employee training and employee activities</li> </ul>
 <b>Government</b>	<ul style="list-style-type: none"> <li>Implementing industry development policies</li> <li>Honest and law-abiding operation</li> <li>Paying taxes in accordance with the law</li> <li>Driving employment</li> <li>Preventing operational risks</li> </ul>	<ul style="list-style-type: none"> <li>Participating in policy and planning research and formulation</li> <li>Special reports</li> <li>Accepting supervision and assessment</li> <li>Law-abiding operation and fair competition</li> </ul>
 <b>Community and the public</b>	<ul style="list-style-type: none"> <li>Promoting regional economic and cultural development</li> <li>Helping the disadvantaged groups in society</li> </ul>	<ul style="list-style-type: none"> <li>Participating in regional economic development</li> <li>Charity activities</li> </ul>

 Communication with stakeholders

## Analysis of Material Topics

To further guide the implementation of daily ESG management, the Company clarified 21 topics that are important to the Company's business and stakeholders in accordance with the GRI Standards and MSCI rating requirements, and in combination with national policies, industry trends and the Company's actual development, and responded to and disclosed them in this Report.



 Substantive Topics of the Company

## Response to UN SDGs

We are committed to advancing the United Nations 2030 Agenda for Sustainable Development. Through our actions, we actively contribute to the realization of the UN Sustainable Development Goals (SDGs) for 2030.

### Chapter: Chapter 5

- We uphold fair labor practices by providing all employees with written contracts, equal pay for equal work, and competitive salaries and benefits. Our policies strictly prohibit illegal labor practices such as child labor and forced labor, while ensuring the enforcement of a comprehensive welfare system.

### Chapter: Chapter 2

- We focus on end-to-end energy conservation and emissions reductions, while developing action plans for efficient energy management programs. Our commitment to energy efficiency and clean energy use aligns with our national strategies.

### Chapter: Chapter 2

- We place great importance on water resource management, including the responsible handling of wastewater in accordance with the law and the mitigation of water-related risks at our operational sites. We embrace green practices throughout the Company to raise environmental awareness and promote water conservation.

### Chapter 5

- We actively combat gender discrimination and harassment to ensure that all employees, regardless of gender, receive equal treatment in terms of job positions and compensation. Furthermore, we have implemented job retention policies and specific benefits for female employees to protect their rights and interests.

### Chapter: Chapter 4, Chapter 5

- We have established long-term partnerships with higher education institutions to support our country's scientific research and human resource development efforts. Our robust talent training system prioritizes employee development, offering a full range of learning opportunities and career paths to ensure that our employees receive relevant training at every stage of their professional journey.

### Chapter: Chapter 5

- We prioritize our employees' well-being and development by upholding a management culture centered on their needs. This commitment is reflected in our dedication to maintaining a safe and healthy work environment through a robust occupational health and safety management system. By ensuring the physical and mental well-being of our workforce, we aim to create an exceptional workplace environment that enhances employee welfare.

### Chapter: Chapter 3, Chapter 4

- With clean tech innovation and opportunities as our core corporate strategy, we have intensified our efforts in technology development and management. Supported by a robust R&D management system, we continuously increase our investment in innovation to drive technological progress. Additionally, we maintain close ties with industry associations and actively participate in various industry events to contribute to sustainable industry development.

### Chapter: Chapter 5, Chapter 6

- We uphold an equal employment policy, ensuring fair treatment for all employees. Our approach to development is diverse and inclusive, aiming to foster a harmonious and equitable work environment by offering fair compensation and benefits. Additionally, we actively engage in charitable activities to demonstrate corporate care and reduce social inequality.

### Chapter: Chapter 1, Chapter 2

- We advocate responsible business practices and stand against unfair market competition. Furthermore, we are committed to continuously improving our energy efficiency to foster the development of a green and circular economy.

### Chapter: Chapter 2

- We have set carbon neutrality goals for Shanshan Anode by 2060 and for Shanjin Optoelectronics by 2050. We have also developed green pathways for emissions reduction. Additionally, we are actively monitoring our operational greenhouse gas emissions while increasing the use of clean energy.

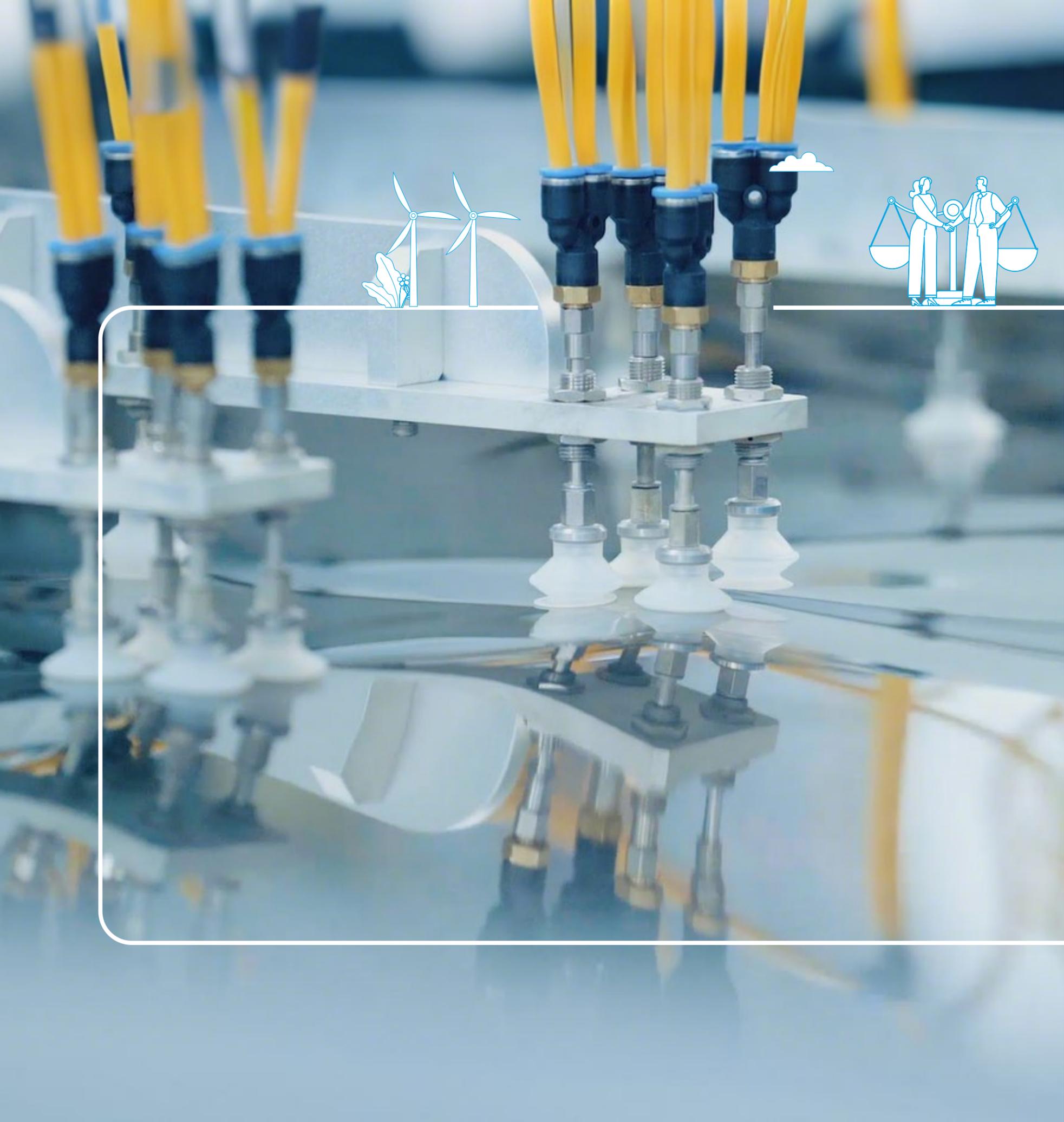
### Chapter: Chapter 1, Chapter 4

- We have established an efficient and legally compliant governance system with clearly defined rights and responsibilities and enhanced business ethics management. We have taken protective measures and conducted training in areas such as anti-corruption, information security, and intellectual property. Additionally, we have set strict management requirements for our suppliers and other partners.

### Chapter: Chapter 3, Chapter 4

- We foster technological innovation through industry exchanges as well as industry-academia research collaborations, thereby facilitating the coordinated development of our profession and industry. Additionally, we have established equal and trusting partnerships with our suppliers to create a sustainable supply chain.





# 01 Lean Management and Solid Foundation

## Ideas

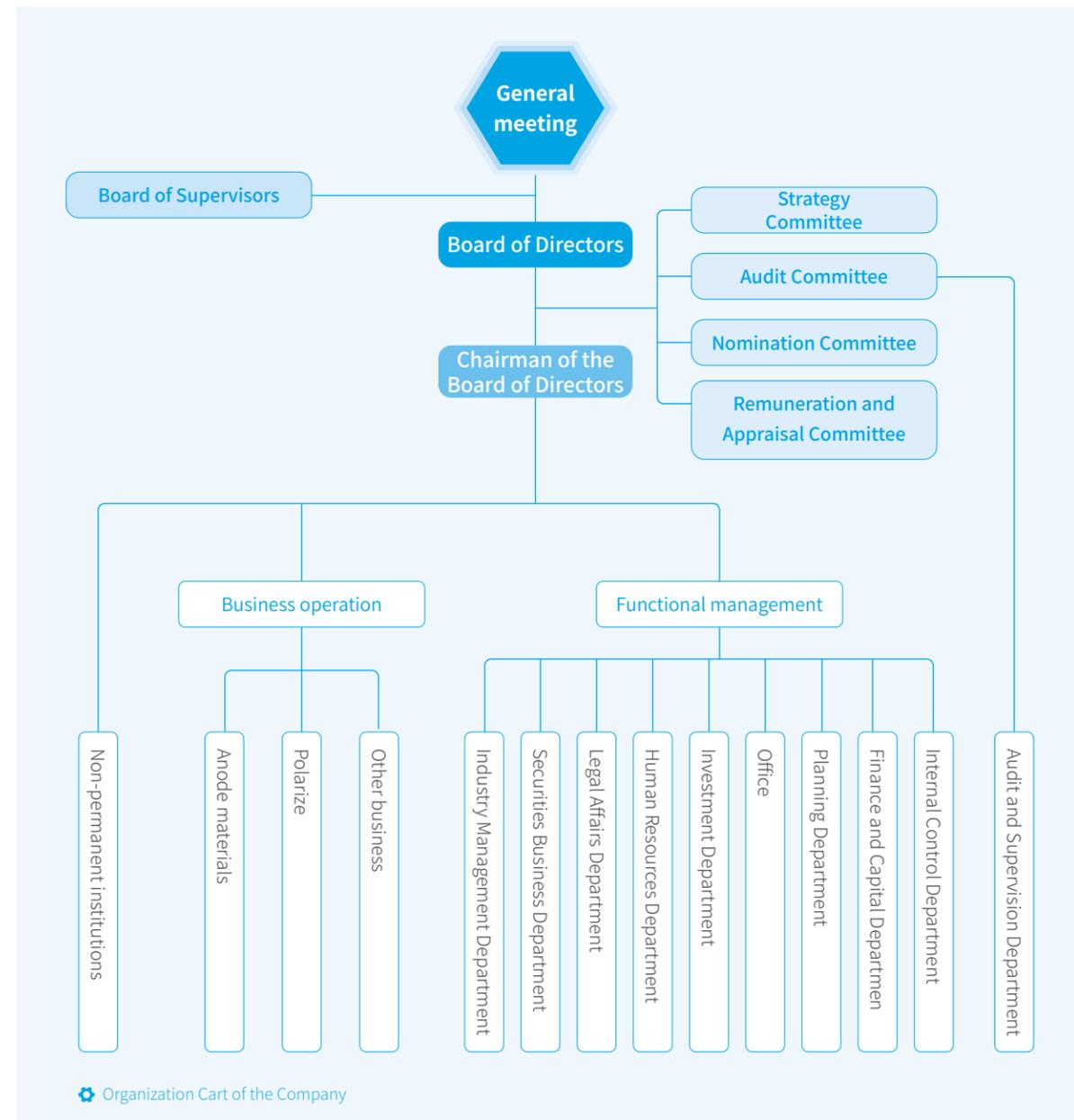
Scientific and efficient corporate governance is the cornerstone for Shanshan to achieve sustainable development. The Company formulates and continuously improves a modern corporate governance system in strict accordance with the requirements of laws and regulations, attaches importance to integrity and anti-corruption, actively identifies and avoids risks, strengthens business ethics, emphasizes information security management, and takes practical actions to promote the Company's long-term development and continuously improve the Company's governance level.

## Our actions

- Strengthen corporate governance
- Investor rights and interests protection
- Internal control and risk management
- Compliance with Business Ethics
- Protecting information security

# Strengthen Corporate Governance

In strict accordance with the provisions of relevant laws, regulations and normative documents such as the Company Law, the Securities Law and the Code of Governance for Listed Companies, and in light of actual development conditions, Shanshan continuously optimized the internal management system, established the general meeting, the Board of Directors and its subordinate special committees and the Board of Supervisors. Based on the independent and diversified three-meeting structure and a modernized corporate governance system, Shanshan continuously improved the corporate governance level, and promoted scientific internal decision making and efficient execution, safeguarding the legitimate rights and interests of the Company and its shareholders, and laying the foundation for the Company's standardized operation and sustainable development.



### General meeting

- The general meeting is the Company's authority body, which makes decisions on the Company's business policies and investment plans, and reviews and approves reports of the Board of Directors, etc. in accordance with the law.
- The Company complies with the Rules for the General Meeting of Listed Companies, standardizes the convening, holding and voting procedures of the general meeting, ensures that all shareholders enjoy equal shareholder status and shareholder rights, and fully protects the legitimate rights and interests of shareholders.
- For the general meeting, the Company hires lawyers to issue legal opinions on the compliance and legality of the general meeting and make announcements.

### Board of Directors

- The Board of Directors operates in accordance with the requirements of relevant laws, regulations, rules and policies such as the Company Law, the Articles of Association and the Rules of Procedure of the Board of Directors. All directors conscientiously perform their duties and actively participate in relevant business training.
- The Board of Directors has established the Strategy Committee, the Audit Committee, the Nomination Committee, and the Remuneration and Appraisal Committee, and is responsible for formulating the working procedures of special committees to standardize their operations.

### Board of Supervisors

- The Board of Supervisors, in strict accordance with the requirements of relevant laws, regulations, rules and policies such as the Company Law, the Securities Law, and the Articles of Association, independently and legally exercises its functions and powers, conscientiously performs its supervisory duties, effectively supervises the Company's operating conditions, financial status and the performance of directors and senior officers, regulates the Company's operations, and safeguards the legitimate rights and interests of the Company and all shareholders.

The Company held **2** general meetings

Reviewing **13** proposals in total

**11** meetings of the Board of Directors

Reviewing **36** proposals in total

**5** meetings of the Board of Supervisors

Reviewing **16** proposals in total.

Responsibilities of Three Meetings of the Company

## Independent and Diverse Board of Directors

The Company further built an independent and diverse Board of Directors after comprehensively considering factors such as the cultural and educational background, gender, age, industry experience, and professional ability, etc. of the candidates to the Board of Directors, to improve the rationality and scientific nature of decision making of the Board of Directors.



The Company's Board of Directors had **11** members, including:

<b>7</b> non-independent directors	<b>4</b> independent directors, and	<b>2</b> female directors
Number of directors with industry professional background or experience: <b>5</b>	Number of directors with risk management experience or legal expertise: <b>3</b>	Number of directors with financial expertise or industry financial management experience: <b>2</b>

### Nomination and Selection of the Board of Directors

The Company established the standardized nomination and selection process for the Board of Directors and its members, and through scientific and effective internal governance, promoted efficient and compliant corporate governance, improved the Company's operational efficiency, and facilitated the Company's long-term and steady development.



🔗 Nomination Process for Directors of the Company

### Compensation Transparency

A transparent compensation policy for directors, supervisors and senior officers is crucial to corporate governance and protection of shareholder rights and interests. In strict accordance with national laws and regulations, upon analysis and discussion by the Remuneration and Appraisal Committee of the Board of Directors and in combination with the actual development of the Company, the Company formulated compensation plans for directors, supervisors and senior officers, publicly disclosed the compensation and equity incentives of directors, supervisors and senior officers, and actively accepted market and shareholder supervision over compensation policies, to help investors better understand the Company's governance structure and the fairness and rationality of the compensation and incentive system.



## Protection of Investor Rights and Interests

Shanshan has always regarded the protection of investor rights and interests as an important part of corporate governance, and is committed to building a transparent and efficient communication mechanism, and providing investors with a fair and just investment environment, to safeguard the legitimate rights and interests of investors, further consolidate the Company's healthy interactive relationship with the capital market, and promote the Company's stable and sustainable development.

### Information Disclosure

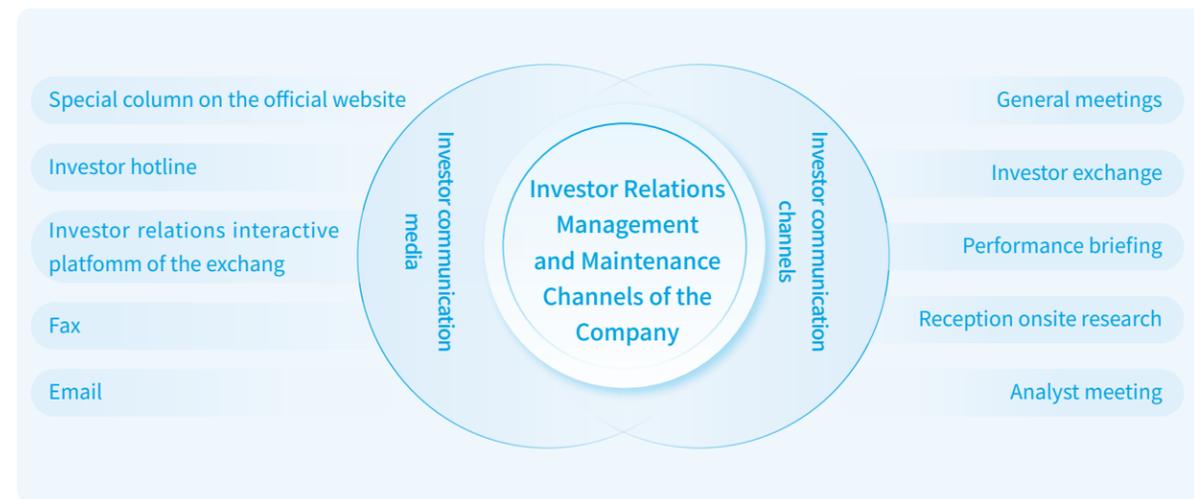
Since its listing, the Company has disclosed information truthfully, accurately and completely in its daily operations in strict accordance with the relevant laws and regulations such as the Rules Governing the Listing of Stocks on Shanghai Stock Exchange and the Administrative Measures for Information Disclosure of Listed Companies and internal governance systems such as the Articles of Association and the Management System for Information Disclosure Affairs. The Company's designated information disclosure media were China Securities Journal, Shanghai Securities News, Securities Daily, Securities Times and the website of Shanghai Stock Exchange (www.sse.com.cn). All information that should be disclosed by the Company was published in the above-mentioned designated newspapers and website, ensuring that all shareholders can obtain the Company's information fairly and promptly.

The Company's information disclosure was implemented by the Company's Board of Directors, with the Chairman of the Board of Directors as the first person responsible for the Company's information disclosure, the Secretary of the Board of Directors responsible for specific coordination, and the Securities Affairs Department as the permanent institution for the Company's information disclosure. The Company guided its information disclosure with the Management System for Information Disclosure Affairs of Ningbo Shanshan Co., Ltd., and formulated supporting information disclosure management documents such as the Insider Registration Management System of Ningbo Shanshan Co., Ltd., the Accountability System for Major Errors in Annual Report Information Disclosure of Ningbo Shanshan Co., Ltd., and the Management System for External Information Users of Ningbo Shanshan Co., Ltd. By continuously strengthening inside information management and other work, the Company continued to improve the quality of its information disclosure.



### Investor relations management

The Company attached great importance to investor relations management. The Company formulated the Investor Relations Management Measures and other systems in accordance with relevant laws and regulations, carried out multi-channel, multi-platform and multi-mode management for all investors, continuously improved open, fair, transparent and multi-dimensional investor communication channels, and actively maintained a good relationship between the Company and investors, to enable investors to fully and timely understand the Company's development strategy, business model, and operating conditions, etc.



The Company actively carried out performance briefings, and online and offline investor surveys, including

**2** performance briefings

As at the disclosure date of this Report, the Company responded to a total of

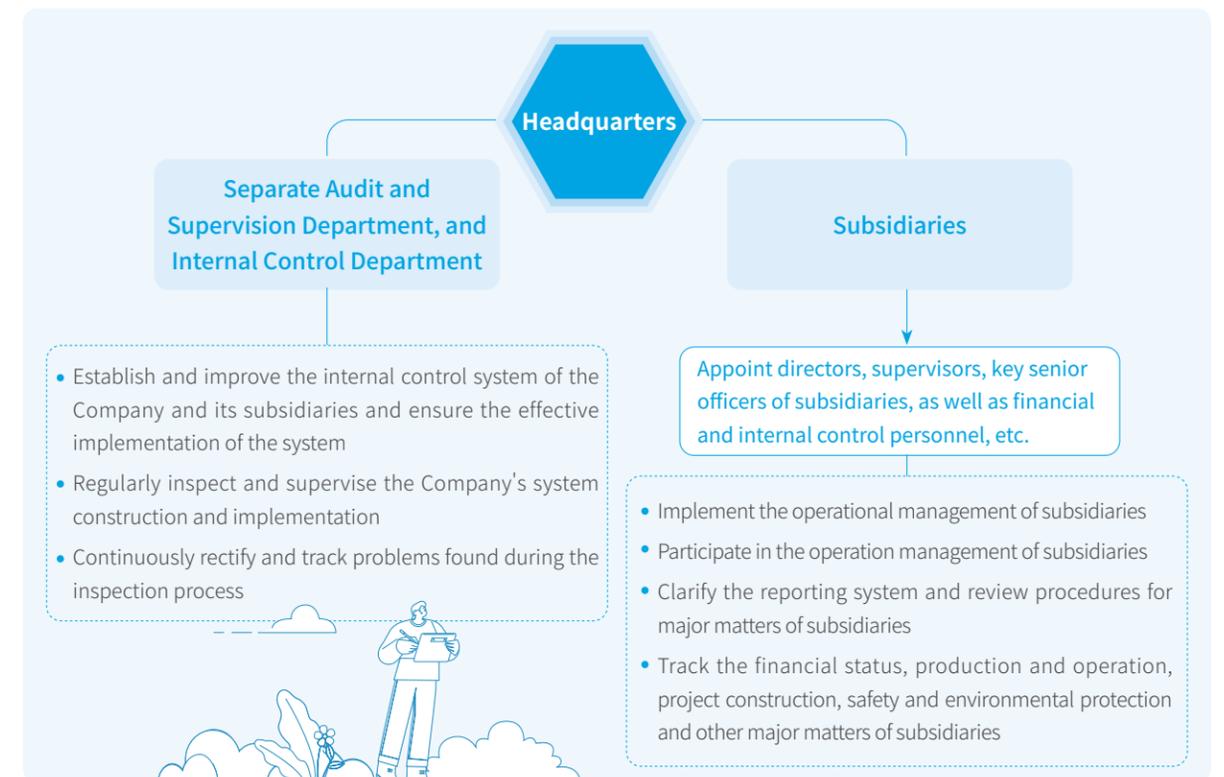
**136** questions from investors during the reporting period through the SSE Infonet

## Internal Control and Risk Management

Shanshan has always regarded law-abiding and compliant operation as the lifeline of corporate development, unwaveringly promoted internal control and risk management in accordance with laws and regulations, and continuously improved its internal control system and risk management system. By integrating compliance management into the entire business process, the Company has established a comprehensive risk identification, assessment, monitoring and response mechanism to ensure that all businesses develops steadily under the premise of controllable risks.

### Internal Control

In strict accordance with the laws and regulations such as the Basic Norms for Internal Control of Enterprises, the Company Law, and the Securities Law, as well as the Articles of Association, and based on the actual situation of the Company, the Company formulated internal control systems in multiple dimensions such as internal control management, personnel management, information management, and security management of Shanshan, and revised and improved them every year. To ensure the effective implementation of internal control, the Company established an organizational structure system for internal control with the headquarters as the core management platform and industrial companies as the execution entities, and set up a full-time internal control department, with the person in charge of the department appointed in the form of shares to ensure the independence and authority of internal control.



Internal control management framework of the Company

The Company's Internal Control Department formulates an annual work plan every year, puts forward requirements for the Company's internal control management from the aspects of improving the Company's internal control management system, strengthening internal control inspections of industrial companies, effectively following up on issues, strengthening the management and supervision of engineering projects, and improving the comprehensive quality of the internal control team, and strictly promotes their implementation.



the Company's Internal Control Department organized its departments to revise the internal control framework system, including **89** systems in **14** cycles; organized and carried out the revision of the system of the department, including **78** systems in **15** cycles; at the same time, carried out the review and reorganization of the internal control system of industrial companies, completing a total of **934** systems in **125** cycles.

The Company's Internal Control Department has formulated management procedure documents for internal control inspections of the Company and its subordinate industrial companies based on actual operating conditions. The scope of internal control inspections includes but is not limited to the operating content of systems in cycles, internal control evaluations conducted twice a year, the implementation of risk assets, the implementation of measures after risk management assessments, the tracking of the progress of engineering projects, and quarterly work safety management.

**Case** Convened a work meeting for internal control line

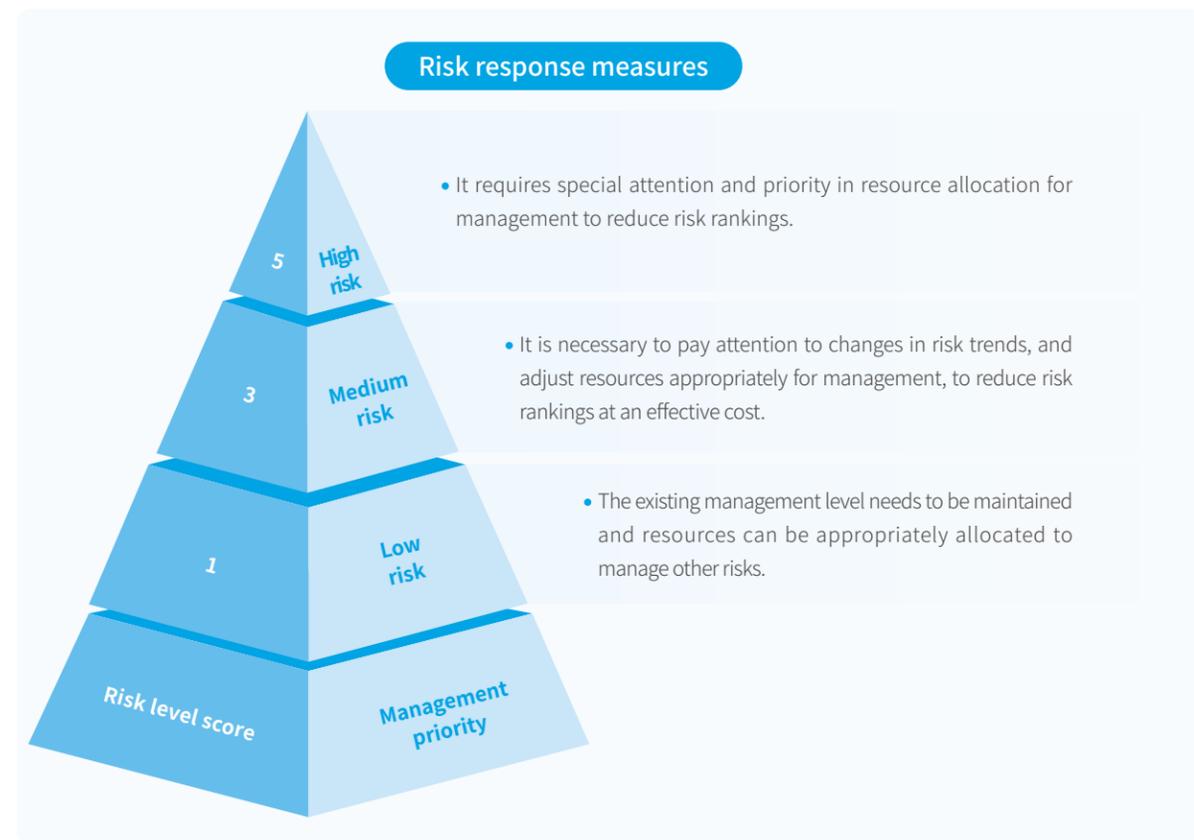
In September 2024, in order to strengthen the internal control management of the Company and improve the work quality and efficiency of the Company's internal control line, the Company's Internal Control Department organized an online work meeting for the internal control line. At the meeting, the progress of the internal control of key industrial companies and the key work at the next stage were first reported, and then training and exchanges on framework systems, engineering management and other contents were conducted. Through the convening of the meeting, the professional capabilities of the appointed personnel were enhanced, and the cohesion and execution of the internal control team were improved, thereby further strengthening the Company's internal management and risk prevention and control capabilities.



Work Meeting for Audit and Internal Control Line

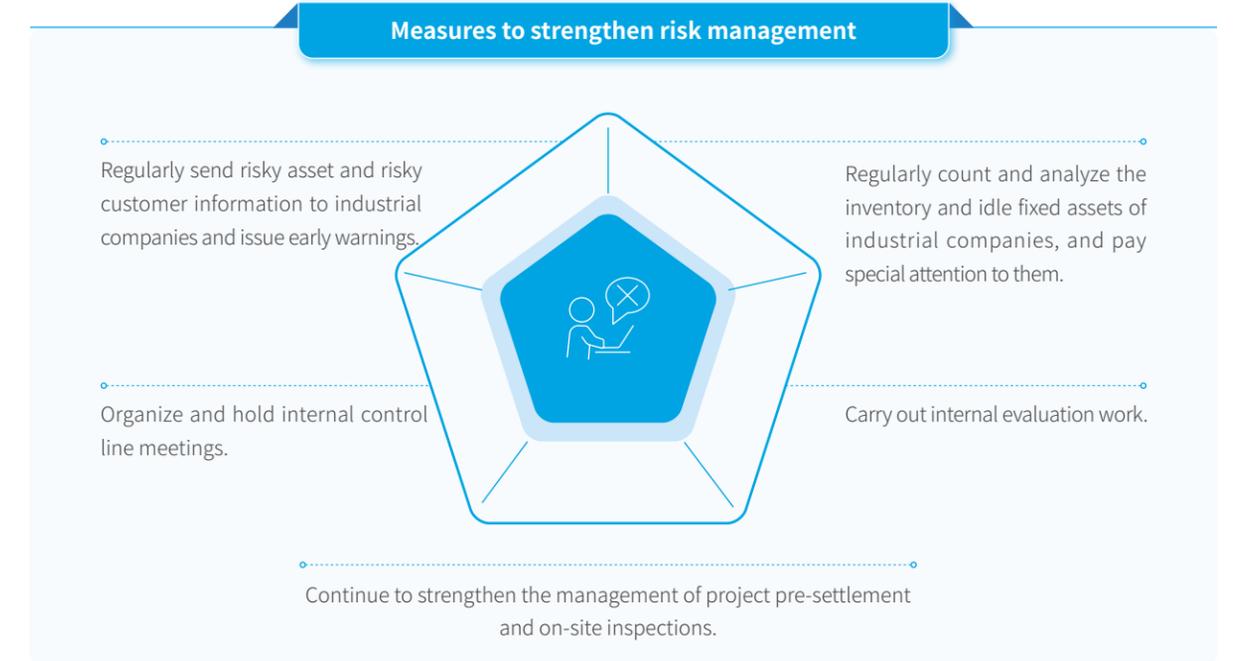
**Risk Management**

The Company has established and continuously optimized the risk management system, which is vertically managed by the Company's Internal Control Department to ensure the effective implementation of risk prevention and control measures, and set up the Risk Asset Management Committee and the risk management team to be responsible for risk level assessment and prevention and control, closely track risk changes, conduct in-depth analysis of external situations and the Company's actual situation, and promptly identify and respond to new risks.



Risk Level Assessment Criteria

After assessment, the Company divided the risks into five categories that are closely related to the Company: strategic risk, financial risk, market risk, operational risk and legal risk, and formulated measures to strengthen risk management, to ensure the effective management and resolution of risk issues, build a solid risk defense line, and provide strong guarantees for the Company's stable and sustainable development.



The Company **had no** significant internal or external operating risks.

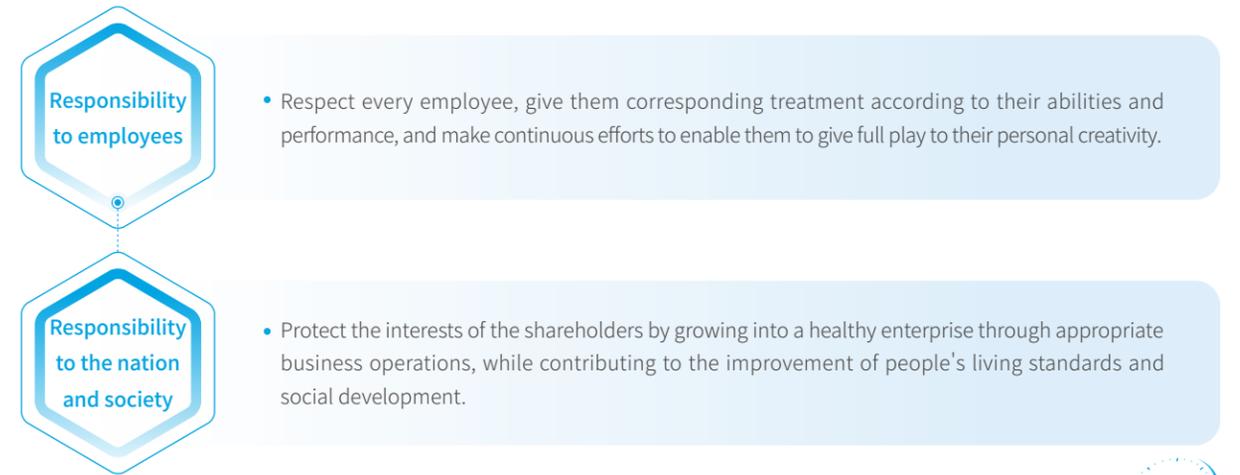
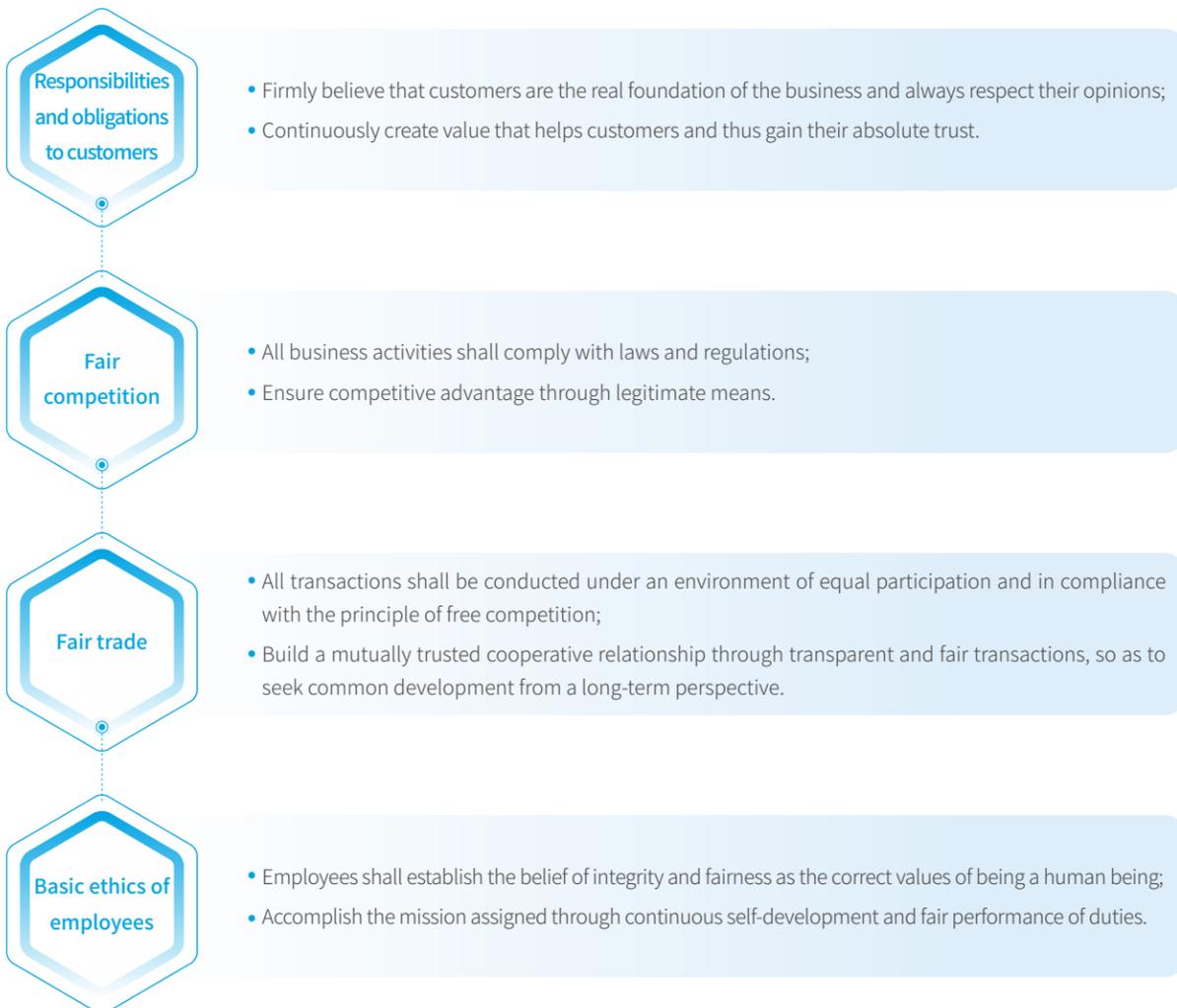


# Compliance with Business Ethics

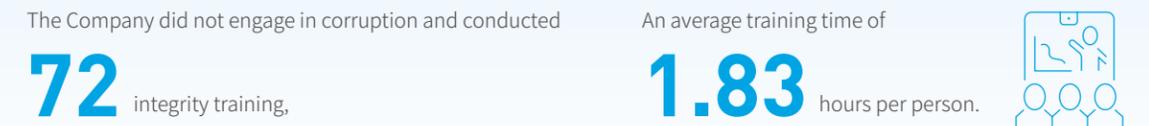
Shanshan has always adhered to the concepts of "creating value for customers" and "management with respect for personality", respected the free and fair market economic order, and continued to promote the construction of business ethics based on mutual trust and cooperation. The Company continuously strengthens the discipline of integrity practice, advocates fair competition, and optimizes the management system, systematically demonstrating the Company's practice and commitment in the field of business ethics, laying a solid moral foundation for creating a world-class enterprise, and also contributing to the healthy development of the industry ecosystem.

## Integrity practice

The Company continues to optimize its integrity practice management system and promotes the establishment of a business environment that is honest, fair, and free of corruption or bribery. Shanshan Anode has required its employees to sign and abide by the Integrity Discipline Commitment, and has conducted integrity training many times; Shanjin Optoelectronics has formulated the Code of Ethics that all employees shall abide by, and clarified the six principles of lawful operations.



### Six Major Ethical Standardization Requirements



Shanshan Anode clearly states that the Company's employees shall uphold the principles of integrity and compliance with laws and regulations, abide by laws and regulations on anti-commercial bribery, anti-embezzlement, etc. and the Company's internal rules and regulations, and must not accept bribes from others, bribe others or introduce bribes, or utilize the convenience of their positions to embezzle the Company's property or misappropriate public funds.

### Case Conducted training to enhance the Business Ethics awareness of middle and senior management

In September 2024, Shanshan Anode Jiuyuan and Qingshan Factory conducted a 32-hour risk prevention awareness training for all middle and senior management personnel, and requested the participants to disseminate the training downward after the meeting, so as to enhance the risk prevention awareness of all employees of the Company.



Business Ethics Training for Middle and Senior Management

### Case Shanshan Anode Sichuan Factory carried out integrity training to establish correct professional values

In September 2024, in order to actively respond to the construction of corporate culture and integrity culture, Shanshan Anode Sichuan Factory carried out a one-hour integrity training for all employees. After the Internal Control Department conducted training for employees in key positions and middle and senior management, each department conducted secondary publicity and integrity norms for employees in front-line positions. At the same time, integrity training was solidified as one of the contents of the induction training for the new employees, advocating employees to establish correct professional values and create an internal integrity working atmosphere.



Integrity Training at Shanshan Anode Sichuan Factory

## Reporting Channels and Protection

The Company attaches great importance to the constraints on internal and external fraud and unethical behavior. It has formulated and reviewed the supervision system for reporting special matters and whistleblower protection mechanism, established multiple channels to encourage employees of the Company and its subsidiaries to make well-intentioned reports and complaints about fraud and unethical behavior they have discovered or been informed of, and clarified the reward measures for those who have successfully reported the matter.

At the same time, the Company has established and continuously improved the whistleblower anti-retaliation mechanism, strictly protecting well-intentioned whistleblowers and relevant witnesses from any unfair treatment due to their evidence-giving behavior, and stipulates that any person who retaliates against well-intentioned whistleblowers or relevant witnesses will be subject to severe disciplinary sanctions, and those with serious circumstances will be terminated from the labor relationship, and those who constitute a crime will be transferred to the judicial authorities for handling in accordance with the law.

Reporting channels	
Channel	Contact information
 Reporting phone No.	13777992677
 Email for reporting	jubao-ssgf@shanshan.com
 Reporting address	28/F, Shanshan Building, No. 777 Rili Middle Road, Yinzhou District, Ningbo City, Zhejiang Province (to the person in charge of the Audit and Supervision Department)

Embed reporting information in formatted texts such as public works, procurement bidding information, and bidding documents

Embed reporting information in written contracts such as investment confidentiality agreements, equity transfers, merger and acquisition agreements, and financial leasing agreements of financial industry companies



Reporting information can be embedded in all kinds of written contracts for purchase and sale, commissioned processing, engineering construction, building installation, etc. of the Company

All industrial companies shall announce reporting information in public places (canteen, office area) within the company (phone, email, WeChat, integrity account)

Expand the Way to Obtain Clues from Reporting Information

## Fair Competition

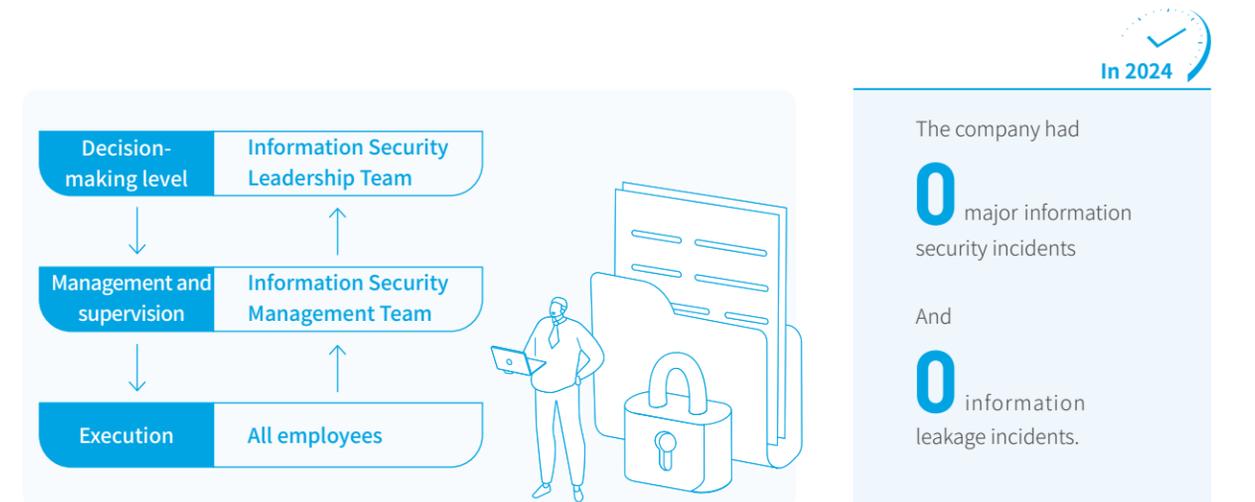
The Company always follows the principles of voluntariness, equality, fairness and integrity in terms of production and operation activities, continues to create a business environment of fair competition, and strives to maintain the order of market competition. Shanshan Anode has incorporated the code of conduct for fair competition into its integrity guidelines, and strictly prohibits any form of unfair competition, such as false publicity, malicious defamation of competitors, etc.; it has incorporated the principle of fairness into the code of business ethics, and clarified that no employee of the Company shall defraud others by tampering with, concealing and abusing privileged information, or by misrepresenting material facts or other unfair business activities.

## Protect Information Security

Shanshan attaches great importance to information security management, strictly follows the ISO 27001 standard, and has established a complete information security governance system. By formulating and implementing systems such as Information Security Policy, Information System Access Management, Information Security Incident Management Regulations and Information Security Management Manual, the Company has clarified the behavioral norms in privacy protection and information security to ensure the integrity, compliance and efficiency of the information system. At the same time, through regular training, risk assessments and emergency drills, the Company continues to enhance the information security awareness of all employees, effectively prevents potential risks, and ensures the data security of customers, partners and the Company itself.

## Information Security Management System

The Company adheres to the information security management policy of "safety first, prevention first, equal emphasis on management and technology, and comprehensive prevention", establishes an information security management organizational structure headed by the General Manager, and forms a three-tier structure of "decision-making - management and supervision - execution". It also establishes a PDCA closed-loop management system to identify and evaluate the possibility and impact of various information security risks, and conducts internal information security audits to ensure effective management of information security.



Information Security Organizational Framework



ISO 27001 Information Security Management System Certification for Shanshan Anode (left), and Shanjin Optoelectronics (right) (selected)

## Information Security Management Measures

In order to improve the Company's information security management level and prevent information security risks, the Company has established an information security management team with diversified professional backgrounds to protect the Company's information security in an all-round way through the formulation and implementation of data security strategies, response and handling of data security incidents, employee data security training and education, data risk assessment and monitoring, information system data backup, backup data update and destruction, and information recovery. In 2024, Shanshan Anode launched a Cyber Security Handbook, which systematically introduced the prevention of network fraud, password leakage, phishing emails, ransomware, etc., providing effective guidance and reference for the protection of employees' personal information.



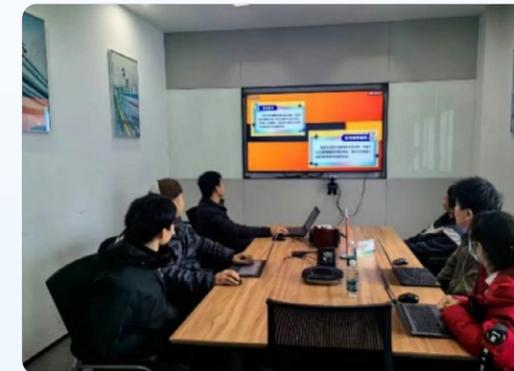
Information Security Management Measures

### Case Launched information security emergency drills to strengthen the ability to handle information security incidents

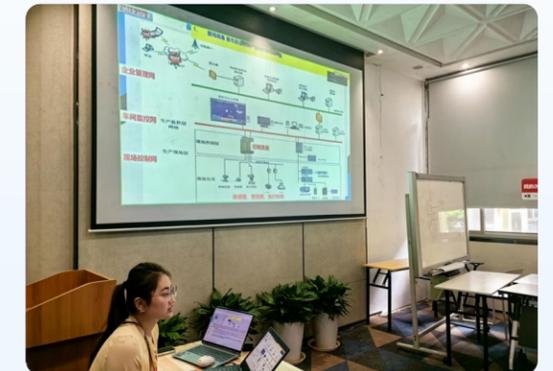
In July 2024, the Company launched the BIP system operation and maintenance emergency drill, aiming to establish and improve the emergency work mechanism for handling computer information system accidents, test the effectiveness of emergency plans, verify the organizational and command capabilities and emergency response capabilities of relevant organizations and personnel in response to network and information security emergencies, and ensure that all emergency command and dispatch work is carried out quickly, efficiently and orderly to meet the needs of network and information system operation guarantee and fault recovery in emergency situations, and ensure the safety and smooth operation of information systems.

### Case Organized and carried out information security training to further enhance employees' awareness of information security

In November 2024, Shanshan Anode organized and carried out a special information security training, which lasted 2 hours, with a total of 17 employees participating in the training. By emphasizing the importance of information security awareness, sharing the definition of information security and ways to prevent all kinds of security risks, it strengthened the employees' awareness of information confidentiality in their daily work and further enhanced their awareness of information security. At the same time, a post-session assessment session was set up in this training, and all participants passed the assessment.



Information Security Awareness Training



The Company conducted a total of **11** information security actions of various types;

Regularly conducted data security vulnerability scanning and repair, with a security vulnerability repair rate of **100%**

Organized **5** data security emergency drills and

**6** data security trainings.



# 02 Protect Nature, Green and Low Carbon

## Ideas

The Company has deeply integrated green development concept into environmental management across the entire value chain. By establishing a sound environmental management system, it actively addresses climate change and contributes to environmental protection initiatives. In addition, the Company has placed high priority on eco-friendly production operations, efficiently managed and utilized resources, continuously increased environmental protection investment, built ecological civilization, striving to achieve the harmonious unity of economic value, environmental value, and social value.

## Our actions

- Environmental compliance management
- Climate change response
- Efficient resource utilization
- Chemical safety management
- Green operation advocacy

# Environmental Compliance Management

Shanshan follows the laws and regulations such as *Air Pollution Prevention and Control Law*, *Solid Waste Pollution Prevention and Control Law*, *Water Pollution Prevention and Control Law* and *Environmental Impact Assessment Law*, and the requirements of ISO 14001 environmental management system, and has established and improved the *Environmental Safety Management Manual*, *Environmental and Safety Operation Control Procedures*, *Environmental Factor Identification and Update Control Procedures*, and *Energy Conservation and Emission Reduction Regulations*. With "compliance with laws and regulations, pollution prevention, people-oriented, and continuous improvement" as the EHS policy, the Company continuously promotes the systematization, standardization and scientificization of EHS management to ensure the Company's environmental compliance management. The Company has established a top-down management structure. The general manager of each branch, subsidiary and factory is the first responsible persons for environmental protection of the Company, breaking down environmental management tasks item by item to ensure the effective operation of the environmental management system. In 2024, **10** factories of the Company obtained ISO 14001 Environmental Management System Certification.



Figure Caption: Shanshan Anode (left) and Shanjin Optoelectronics (right) obtained ISO 14001 Environmental Management System Certification for each factory (selected)

The Company has incorporated clean production into its daily management, continuously increased its investment in environmental protection, and further improved the level of clean production and consolidated the effectiveness of clean production through the implementation of clean production plans to achieve the goals of "energy conservation, consumption reduction, pollution reduction, and efficiency improvement" and built a resource-saving and environmentally friendly enterprise. In 2024, Shanshan Anode Ningbo Factory carried out clean production audits in accordance with relevant requirements of clean production and formed the Clean Production Audit Report.

The Company attaches great importance to environmental risk management and hidden danger investigation, and has formulated systems such as the *Environmental Risk Investigation and Hidden Danger Rectification System* and the *Environmental Protection Monitoring Management System* in accordance with the law. The Company has carried out a strict environmental impact assessment process for all new construction, alteration and expansion of production projects to ensure that the projects meet the requirements of environmental protection during implementation; for daily production operations, the Company has carried out regular and irregular environmental hidden danger inspections and risk assessments, identified possible environmental impact factors, strengthened the inspection, repair and maintenance of environmental protection equipment, ensured that the equipment is 100% intact, and fully implemented rectification measures for environmental risks and hidden dangers. In addition, in response to environmental risks and hidden dangers, the Company has formulated an *Emergency Plan for Sudden Environmental Events*, so as to implement emergency rescue measures and responsibilities, ensure that employees can carry out emergency rescue work quickly, effectively and orderly, protect the safety of employees' lives and property, and reduce environmental pollution.



The Company's environmental protection investment for 2024 totaled RMB

**101.90** million

## Case Shanjin Optoelectronics (Nanjing) conducted emergency drill for sulfuric acid leakage

In September 2024, Shanjin Optoelectronics (Nanjing) simulated a leakage accident in the sulfuric acid filling area in accordance with the Company's emergency plan for sudden environmental incidents. Through the drill, the Company improved the emergency response capabilities of personnel in the event of a sulfuric acid leakage, such as wearing protective equipment, handling waste processes, and avoiding secondary pollution of rainwater wells and sewage wells, found and confirmed the deficiencies and defects of the current emergency plan, and analyzed and formulated rectification measures to make further improvements and perfection. The drill lasted 30 minutes in total, with 100% participation.



Personnel arrived at the scene to block the leakage



Collected the leaked chemicals



Investigate the cause of the leakage



Checked for other hidden dangers

In order to enhance employees' awareness of environmental protection and sense of responsibility, the Company attaches importance to the publicity and education of environmental protection, energy conservation and emission reduction knowledge, conducts regular training for employees to continuously improve employees' awareness of environmental protection and environmental professional and technical level and enhance their practical ability in the fields of energy conservation and emission reduction, resource recycling, etc., and improves the level of environmental protection management within the Company.

## Case Shanshan Anode Ningbo Factory held a clean production training

In November 2024, the Safety and Environmental Protection Department of Shanshan Anode Ningbo Factory organized a publicity training with the theme of "Adhere to 'Clean Production' and Create a 'Waste-Free Factory'". The training lasted for 2 hours in total, leading 32 employees to learn about environmental protection-related laws and regulations, solid waste disposal processes and specifications, etc., and systematically improve employees' environmental protection practice capabilities, laying a foundation of cognition and action for the green and waste-free development of Shanshan Anode Ningbo Factory.



Clean Production Training Activities

## Case Shanshan Anode Jiuyuan Factory held a solid waste compliance management training

In November 2024, Shanshan Anode Jiuyuan Factory organized a one-hour solid waste compliance training, explaining in detail the solid waste storage standards and assessment system to 18 employees from the Production Department, Safety and Environmental Protection Department, and Equipment Department, etc., with an attendance rate of 100%, further enhancing employees' environmental compliance awareness and practical management capabilities.



Clean Production Training Activities

# Response to Climate Change

Shanshan actively responds to the national dual carbon strategy, adheres to the strategic policy of promoting greenhouse gas emission reduction through energy management, sets and publicly commits to extremely ambitious dual carbon goals, and fulfills its environmental commitments with practical investment and practice. In the future, on the basis of continuously improving its own carbon footprint management system, the Company will focus on building a carbon-neutral ecosystem in the supply chain, and link up upstream and downstream partners to jointly build a low-carbon value chain through actions such as green technology output and co-construction of low-carbon products, providing a replicable Shanshan sample for the industrial green revolution.

Because the Company's subsidiaries and factory bases are distributed in many regions and cover a large regional span, there are differences in their geographical environment, business type, energy consumption structure and emission source type. In order to make the goals more adaptable and executable, the Company jointly formulates independent carbon emission reduction goals for subsidiaries and factories, and can carry out carbon emission management in accordance with the requirements of standards such as ISO 14064, including setting up a climate change management structure, carrying out special practices for energy conservation and carbon emission reduction, etc.

Similarly, the Company has established systems such as *the Energy Management Manual*, set independent energy management goals and planned energy conservation paths according to the actual condition of each subsidiary and factory, actively carried out energy management practices, promoted renewable energy substitution and increase the coverage of factories have obtained ISO 50001 Energy Management System Certification.



As of December 31, 2024

A total of **8** factories of the Company obtained ISO 14064 Carbon Verification Statement.



ISO 14064 Greenhouse Gas Verification Statement for Shanshan Anode (left) and Shanjin Optoelectronics (right) (selected)

As of December 31, 2024

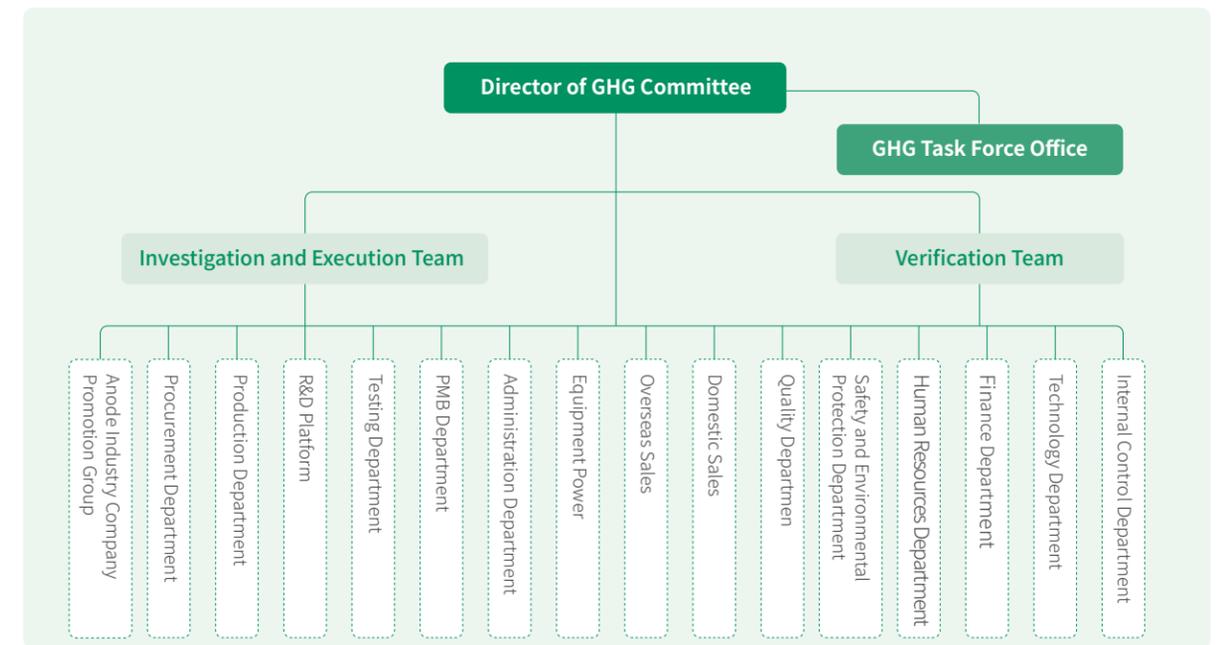
A total of **5** factories of the Company obtained ISO 50001 Energy Management System Certification.



ISO 50001 Energy Management System Certification for Shanshan Anode (left) and Shanjin Optoelectronics (right)(selected)

## Shanshan Anode

Based on its actual development process and strategic deployment, Shanshan Anode has set and disclosed carbon targets, adjusted the base year to 2023, refined and disassembled the targets and implemented them in each factory, planned the medium- and long-term goals for carbon emission reduction and sustainable development of Shanshan Anode, formulated an action plan for emission reduction and sustainable development, At the same time, under the leadership of the Sustainability Committee, Shanshan Anode has established a GHG Inventory Implementation Committee in each factory to promote carbon emission reduction and ensure the realization of dual carbon goals.



GHG Inventory Implementation Committee of Shanshan Anode

### Goals and planning

#### Shanshan Anode's dual carbon goals

- Decrease by 3% year by year, based on 2023;
- Overall reduction of 34% in Scope 1 and Scope 2 by 2030;
- Achieve carbon neutrality in operations (Scope 1 and Scope 2) by 2050;
- Achieve carbon neutrality in the value chain (Scope 1, Scope 2, Scope 3) by 2060.

#### Shanshan Anode's green electricity implementation goals

The goal is to reach 30% in 2023(already achieved), 60% in 2025, and 100% in 2030.





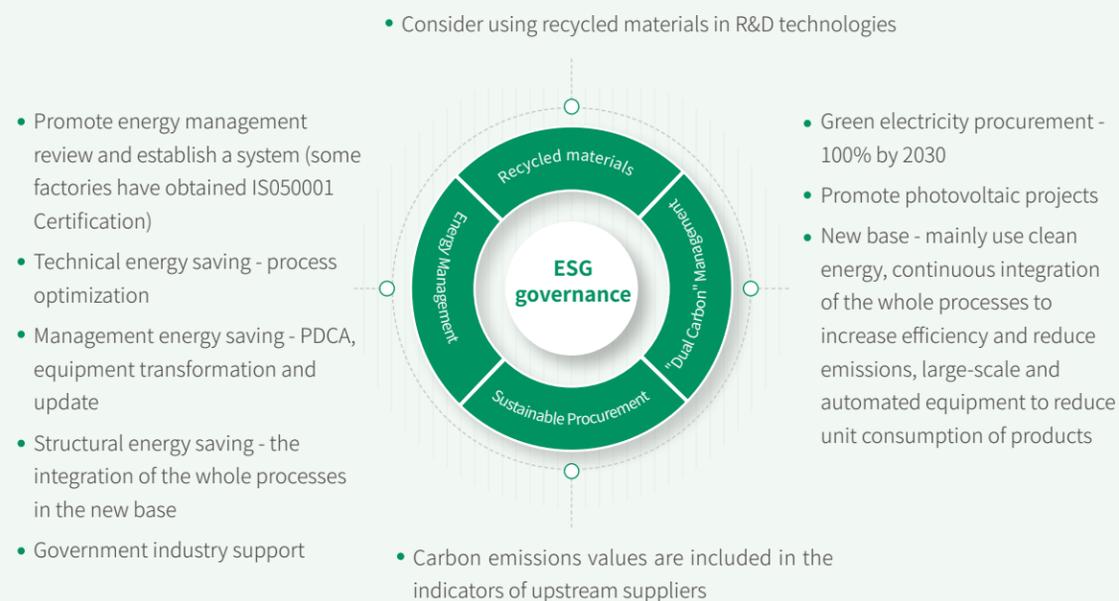
### Shanshan Anode's carbon emission reduction policy

- Adhere to green, circular and low-carbon development, strive to control and reduce greenhouse gas emissions, and promote the sustainable development of the anode industry;
- Adopt new processes, new technologies, new equipment and new materials to accelerate the construction of resource-saving and environmentally friendly new production bases;
- Gradually improve the energy use structure, vigorously utilize renewable energy such as hydropower, wind power, solar energy and biomass energy, and build low-carbon and zero-carbon factories;
- Cooperate with upstream and downstream suppliers to carry out carbon footprint work, promote the optimization of raw material quality and the reduction of raw material consumption, and achieve low-carbon development throughout the entire chain;
- Gather the strength of the entire industry to jointly discuss and create energy conservation and carbon-reduction initiatives, and the shortfall will be neutralized through carbon offsetting.

### Energy Conservation and Emission-reduction Measures

Shanshan Anode has formulated a "four-step" Action Plan for Energy & Carbon Management Program, starting from energy, carbon emissions, recycled materials, and sustainable procurement, to the realization of the goal of carbon neutrality in the value chain by 2060.

#### Action Plan for Energy & Carbon Management Program



### Case

#### Shanshan Anode Qingshan Factory introduced exhaust gas waste heat system to comprehensively reduce the factory's overall energy consumption

In November 2024, Shanshan Anode Qingshan Factory added two sets of plate heat exchangers for heating and one set of plate heat exchangers for hot water supply in the boiler room, and adopted a parallel plate heat exchange system to optimize the original heating and domestic hot water circulation paths, forming a tiered energy supply model that complements waste heat utilization and conventional energy, and promoting the coordinated development of production and operation cost reduction and ecological environment efficiency improvement. As of December 31, the use of waste heat instead of boilers in the living area for heating saved 26,530 cubic meters of gas year-on-year, and the use of waste heat instead of boilers in the production area for heating saved 10,634 cubic meters of gas year-on-year, with a total natural gas saving of 97,415 cubic meters.



Aerial Photo of the Newly Renovated Exhaust Gas Station

### Case

#### Shanshan Anode actively participated in green electricity transaction and embraced clean energy opportunities

In 2024, Shanshan Anode and its subsidiaries actively participated in green electricity transaction and obtained green certificates. The annual trading volume reached 1,834,122.56 MWh, continuously promoting green and low-carbon transformation.



Green Electricity Certificate Transaction Vouchers (selected)



## Shanjin Optoelectronics

Shanjin Optoelectronics has set and made public carbon targets, formulated action guidelines for emission reduction and sustainable development, and implemented various emission reduction measures to promote the progress of achieving carbon neutrality targets.

### Goals and planning

#### Shanjin Optoelectronics' dual carbon goals

Fully achieve carbon neutrality by 2050.

#### Shanjin Optoelectronics' energy management goals for 2024

- Shanjin Optoelectronics (Zhangjiagang): In the next year, the Company's total electricity consumption will decrease by 10% year-on-year
- Shanjin Optoelectronics (Nanjing): In the next year, the Company's total electricity consumption will decrease by 1% year-on-year.

#### Shanjin Optoelectronics implements the 2022-2024 medium- and long-term green development plan



With the goal of "achieving full carbon neutrality by 2050", Shanjin Optoelectronics (Nanjing) has established a clear basic concept of environmental health and safety, and puts environmental health and safety first in all business activities. It actively carries out medium- and long-term planning in green product R&D, green factories, and green procurement, and leads the transformation and upgrading of the industry by continuously increasing investment in environmental protection research, using renewable energy, carrying out energy conservation and emission reduction, practicing "carbon emission reduction" actions, and building a green and responsible supply chain, promoting the low-carbon development of China's new display industry and manufacturing industry, and helping achieve China's "carbon peak and carbon neutrality" goals.

### Energy Conservation and Emission-reduction Measures

#### Case Utilized idle rooftops for photovoltaic construction, and increased the use of clean energy

In 2024, Shanjin Optoelectronics (Nanjing) and Shanjin Optoelectronics (Zhangjiagang) utilized idle rooftop resources to lay rooftop photovoltaic projects, increasing the proportion of clean energy use, replacing traditional energy, and reducing greenhouse gas emissions. The total power generation of photovoltaic projects in the two places for 2024 was 2,316.39 MWh.



Shanjin Optoelectronics (Nanjing) Photovoltaic Project



Shanjin Optoelectronics (Zhangjiagang) Photovoltaic Project

#### Case Installed the waste heat recovery device to reduce steam consumption

In 2024, Shanjin Optoelectronics (Zhangjiagang) installed the waste heat recovery device to recycle heat energy from the production process, reducing steam consumption, and promoting the reduction of greenhouse gas emissions in operations. The newly installed RTO waste heat recovery device can use the heat energy of the terminal exhaust to preheat the production line OVEN, thereby achieving the energy-saving goal of reducing steam consumption and saving 11,755.92 tons of steam per year.



RTO Waste Heat Recovery Device of Shanjin Optoelectronics (Zhangjiagang)

### Results and Performance

The company has comprehensively carried out greenhouse gas management. On the basis that Shanjin Optoelectronics (Guangzhou) was rated as the "2024 Guangdong Province Green Factory" and the "2024 National Green Factory", and Shanshan Anode Chenzhou Factory was rated as the "Hunan Province Green Factory", in 2024, Shanjin Optoelectronics (Nanjing) won the "SGS Green Mark"-ENVIRONMENTAL CLAIMS CERTIFICATE certification; Shanshan Anode Ningbo Factory was selected as the "Ningbo City-level Green Factory" and "2024 Ningbo Quiet Factory", and Shanshan Anode Qingshan Factory was selected as the "Baotou City-level Green Manufacturing Demonstration Unit".





Case

Shanshan Anode Qingshan Factory was selected as the "Baotou City-level Green Manufacturing Demonstration Unit"

In May 2024, in order to better respond to the "Made in China 2025" action program, Shanshan Anode Qingshan Factory, with the goal of "improving quality, reducing costs, and increasing efficiency", set up a green factory construction leadership group in accordance with the concept of green development, striving to improve the green level of the factory.

2024 Baotou City-level Green Manufacturing Demonstration Unit		
No.	Name of enterprise/park	Region
Green factory		
7	Qinghai-Tibet Zai Ying Ying Connection Co., Ltd.	Qingshan District

Shanshan Anode Qingshan Factory was Selected as the City-level Green Manufacturing Demonstration Unit

Type	Unit	Shanshan Anode	Shanjin Optoelectronics
Scope 1	tCO <sub>2</sub> e	26,888.22	15,621.85
Scope 2	tCO <sub>2</sub> e	1,919,612.56	196,152.09
Scope 3	tCO <sub>2</sub> e	2,360,346.63	0
<b>Total emissions</b>	tCO <sub>2</sub> e	<b>4,306,847.40</b>	<b>211,773.94</b>

GHG emissions of Shanshan Anode and Shanjin Optoelectronic

On the basis of carbon emission reduction in the production and operation stage, the Company has gradually extended carbon emission reduction practices to the product category, and conducted full life cycle carbon footprint management from "cradle to gate" according to standards ISO 14044 and ISO 14067 every year, providing data and practices for carbon emission reduction in the industrial chain and contributing low-carbon products to society.

The greenhouse gas emissions of 1 square meter of polarizing plate during the life cycle are 3.56 kgCO<sub>2</sub>e. Among them, the greenhouse gas emissions at each stage are as follows:

Life cycle stage	Greenhouse gas emissions (kgCO <sub>2</sub> e/kg)	Proportion
Life cycle stage	2.14	60.30%
Product production	1.42	39.70%
<b>Total</b>	<b>3.56</b>	<b>100%</b>

As of December 31, 2024, the Company obtained the ISO 14044 Life Cycle Assessment Verification Statement for one product, anode material FSN-1.

As of December 31, 2024, the Company obtained ISO 14067 Product Carbon Footprint Certificate for 6 products, an increase of 4 compare to last year.



Shanshan Anode obtained ISO 14044 Life Cycle Assessment Verification Statement



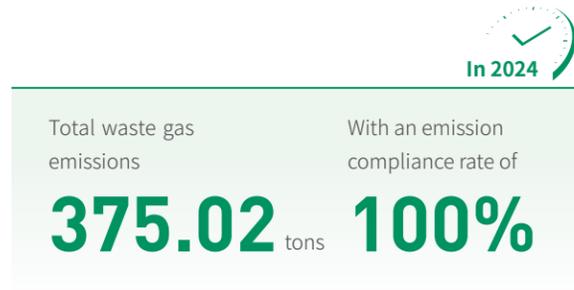
Shanshan Anode (left) and Shanjin Optoelectronics (right) obtained ISO 14067 Product Carbon Footprint Certificate (selected)



# Efficient Resource Utilization

## Waste Gas Treatment

In accordance with the laws and regulations such as the Law on Prevention and Control of Air Pollution, and following the principle of "source emission reduction, process control, and emission compliance", the Company has formulated systems such as the Regulations on Atmospheric Management and the Waste Gas Treatment Management System. By carrying out waste gas treatment projects such as technological transformation and equipment upgrades, the Company continuously tracks the operation and treatment effects of the projects to ensure that the discharged waste gas meets environmental standards and that waste gas emission reduction and control work is effectively implemented.



### Case Shanshan Anode Ningbo Factory optimized waste gas treatment measures to improve VOCs removal efficiency

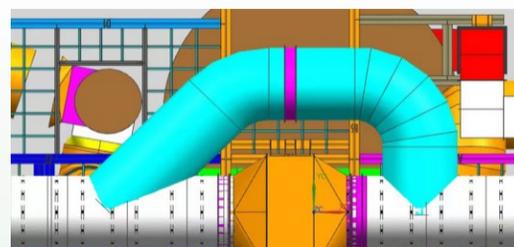
In 2024, in order to further improve waste gas treatment measures, Shanshan Anode Ningbo Factory transformed the original project's "water spray + oil spray + electric coke capture + incineration" measures into high-altitude emissions after RTO/TO treatment, increasing the removal rate of VOCs in sintering waste gas from the original 95% to 99%, and reducing VOCs emissions by 34.121 t/a.



RTO/TO Waste Gas Treatment Facilities at Shanshan Anode Ningbo Factory

### Case Shanjin Optoelectronics (Nanjing) built a waste heat recovery system to effectively reduce the use of steam

In 2024, Shanjin Optoelectronics (Nanjing) added a heat exchanger at the end of CTO4# emission, using the waste heat of 170 °C exhaust gas to produce hot water, which is supplied to other locations in the factory that use heat sources. The temperature of exhaust gas was reduced by 45 °C, and the temperature of replacement water was increased by 20 °C, with the replacement heat reaching 10,080,000 kJ/hour, which can save about 87 tons of steam per day.



Schematic Diagram of Waste Heat Recovery System

## Waste Treatment

The Company strictly follows the laws and regulations such as the Environmental Protection Law, the Law on the Prevention and Control of Environmental Pollution by Solid Waste, and has formulated institutional documents such as the Waste Management Regulations, Waste Warehouse Management Standards, Hazardous Waste Management Operation Standards and Environmental Permit Management Standards. It has formulated management and control requirements and responsibilities of all departments for the generation, classification, collection, transshipment, storage and transportation links, and classified and managed waste according to the actual types of waste generated, and entrusted relevant qualified units to carry out compliant treatment. At the same time, the Company pays attention to all stakeholders in the industrial chain, and actively takes innovative measures in multiple aspects such as supply chain, transportation, and packaging material management to achieve environmental protection and reduce waste generation. In 2024, **Shanshan Anode Ningbo Factory was awarded the title of "Zhejiang Province Waste-Free Factory"; Shanshan Anode Qingshan Factory was awarded the title of "Baotou City Green Factory"; Shanshan Anode Sichuan Factory was awarded the title of "Meishan City Waste-Free Factory" and "Meishan City Green Factory"**, demonstrating tangible actions to advance green, low-carbon, and circular development.



### Waste Reduction and Lightweighting Measures

Shanshan Anode encourages the reuse of ton bags and pallets, and sell the scrapped ton bags and scrapped pallets that cannot be reused as recyclable materials.

Shanshan Anode strengthens the classification management of solid waste, collect and store waste metal, wood and cardboard separately, and sell them as recyclable materials.

Shanshan Anode encourages customers to return packaging materials, and clean the recycled packaging materials and put them into use.



Shanshan Anode promotes lightweight packaging, and communicate with customers to implement naked packaging delivery.

Shanjin Optoelectronics (Zhangjiagang) recycled raw materials are used to fix roll cardboard for roll shipment, saving RMB30,000 in packaging material costs.



**Case** Shanshan Anode Yunnan Factory introduced a packaging material recycling plan to promote the implementation of recycling and reuse

From April to October 2024, the Production Departments 1 and 2 of Shanshan Anode Yunnan Factory used a total of 134,824 ton bags, of which 70,378 were reused old ton bags, with a reuse rate of 52%. In order to further reduce solid waste pollution and waste of resources, Shanshan Anode Yunnan Factory issued the Plan for Recycling and Reuse of Waste Ton Bags (hereinafter referred to as the "Plan") in October 2024. Through measures such as improving material feeding and integrating personnel layout, and formulating a positive incentive mechanism based on 10% of the total amount of recyclable and reusable ton bags, it promoted the circulation, recycling and reuse of ton bags in all workshops within the factory.

Since the plan was introduced, Shanshan Anode Yunnan Factory reused 24,313 old ton bags in November, with a reuse rate of 78%; in December, 17,182 old ton bags were reused, with a reuse rate of 60%, and the reuse rate of ton bags in both months reached over 60%, thus better responding to the global circular economy policy and promoting the green transformation of the industrial chain.



Reuse of Ton Bags in Shanshan Anode Yunnan Factory



**Wastewater Management**

The Company strictly abides by the laws and regulations such as *the Water Pollution Prevention and Control Law*, and has formulated management documents such as the Wastewater Management Regulations based on the Company's business and condition of the factory, clarifying the management responsibilities of each department for wastewater, and standardizing wastewater treatment. The Company has proposed treatment requirements for the concentration that is lower than the national standard, monitored wastewater discharge in real time and forms a monthly ledger, regularly entrusted qualified third parties to conduct wastewater monitoring, and continued to explore measures for wastewater recycling and wastewater discharge reduction to achieve the goal of water conservation and discharge reduction.



Total wastewater with a discharge compliance rate of  
**3.35** million tons **100%**



**Case** Shanjin Optoelectronics added a wastewater treatment system to promote wastewater recycling

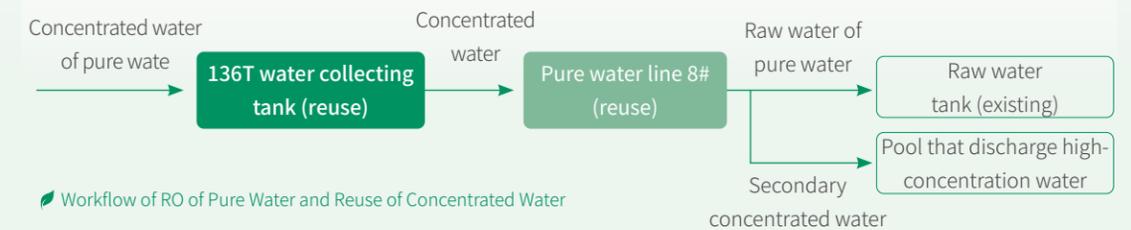
In 2024, the Shanjin Optoelectronics Wastewater Station was equipped with a low-concentration water treatment system, using bag filters and cationic exchange resin to treat some alkaline wastewater. After removing impurities and cations, the treated wastewater is stored in the reuse water tank and then returned to the raw water pool of pure water for reuse.



Shanjin Optoelectronics' Low-concentration Water Treatment System

**Case** Recovery of high-concentration wastewater by Shanjin Optoelectronics (Nanjing) to reduce costs, increase efficiency and promote green production

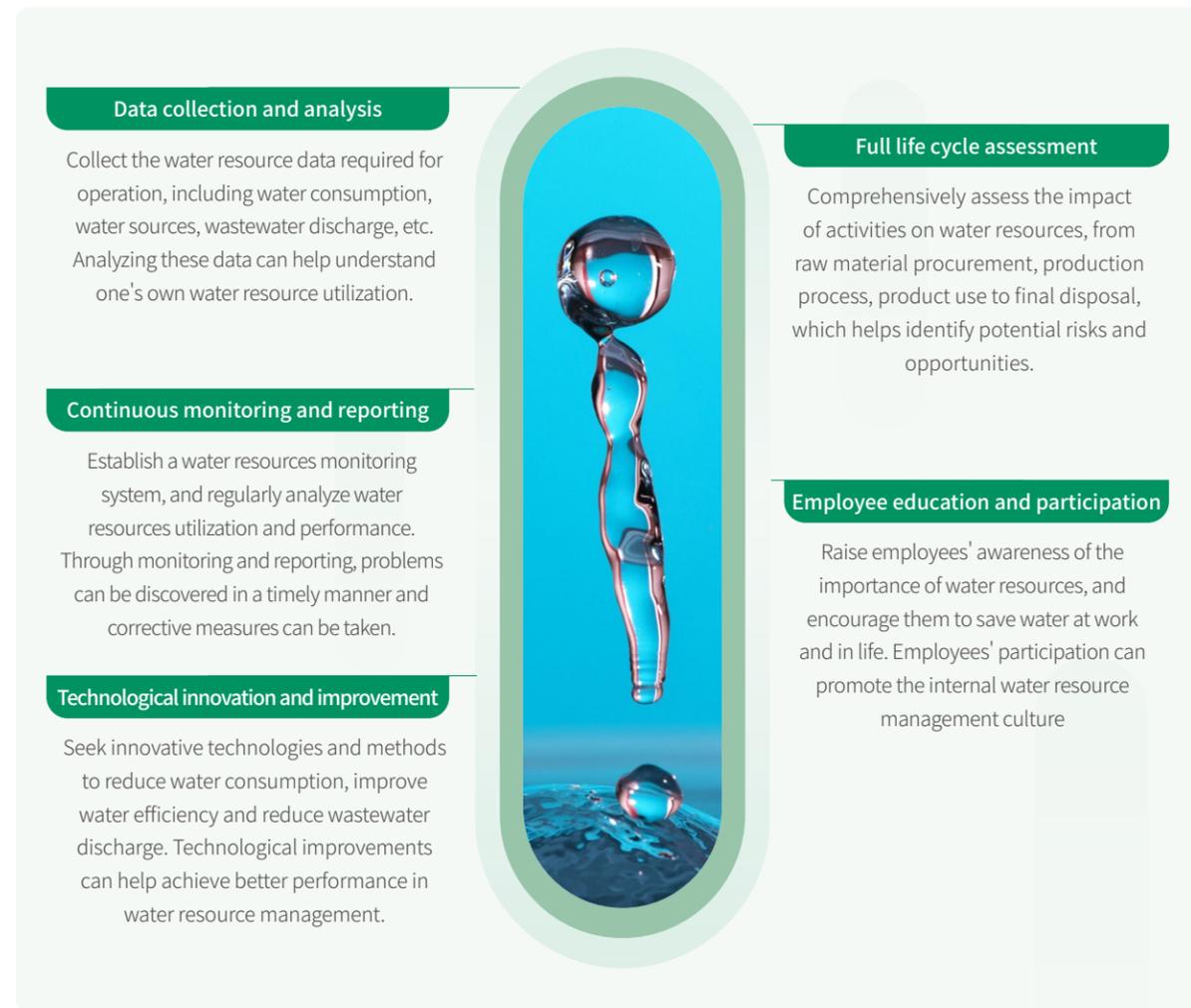
In 2024, in order to solve the pain point of directly discharging the concentrated water generated by the extended pure water line, Shanjin Optoelectronics (Nanjing) adopted the rectification concept of "new system and reuse", invested RMB270,000 to transform the pipeline and electrical control and clean and reuse the RO membrane, and used the existing concentrated water tank, concentrated water pump, security filter, RO membrane shell and membrane, high-pressure pump, existing control system, and dosing system to conduct secondary concentration of the RO concentrated water of the pure water line. 50% of the concentrated water was reused. It is estimated that 194,000 tons of wastewater can be recycled annually, saving about RMB1.36 million.



Workflow of RO of Pure Water and Reuse of Concentrated Water

## Water Resources Conservation

The Company attaches great importance to the conservation and management of water resources, and strictly abides by laws and regulations such as the Water Law and the Water Pollution Prevention and Control Law. It has formulated and optimized management documents such as the Water Pollution Control Management Regulations, Water Quality Management Regulations, Rainwater Management Regulations, and Water Quality Monitoring Operation Standards based on the conditions of each subsidiary and factory, set a water resource conservation strategy, and linked the comprehensive water resource management goals with the performance of the Company's CFO to promote the Company's water resource management from top to bottom. In addition, based on the existing rainwater reuse in the circulating cooling water system, the Company actively explores the use of alternative water sources and plans to use desalinated seawater after the Finnish integration project is implemented.



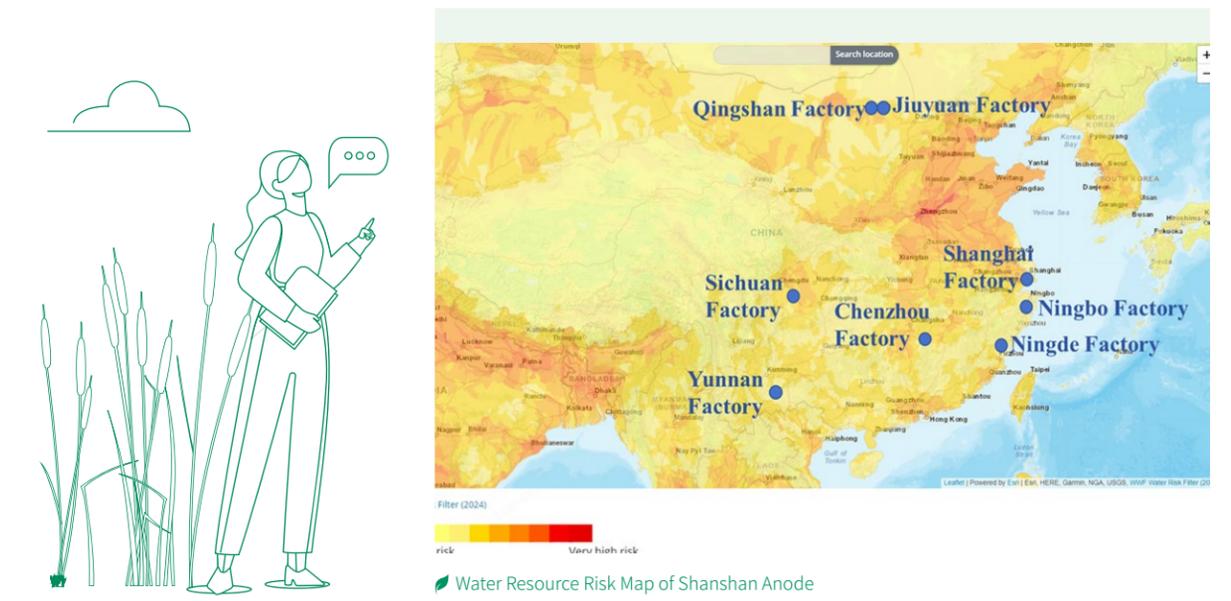
Water Resource Conservation Strategy



**Case** **Shanjin Optoelectronics (Nanjing) added an air conditioning condensed water system to comprehensively improve resource utilization efficiency**

In 2024, Shanjin Optoelectronics (Nanjing) built a special water tank to collect condensed water, and utilized a delivery pump to transport cooling water to the roof for use as cooling tower water replenishment. It will systematically build an air conditioning condensed water recycling system, innovatively achieving a two-way gain of "wastewater reduction + energy efficiency improvement". It is expected to reduce industrial water consumption by 36,000 tons per year, increase the energy efficiency of refrigerators by 0.13, and save 247,056 kWh of electricity.

The Company used the Aqueduct™ tools developed by the World Resource Institute (WRI) to assess annual water risk changes of the place where the Company is located, with the assessment covering indicators such as the quantity of physical risks (e.g. baseline water pressure and the impact of meteorological disasters), and the quality of physical risks (e.g. the impact of water quality). It analyzed water-related regulatory and reputational risks and formed a water resource risk map for each factory's operating site to guide the Company's water resource management, environmental optimization and other work. As of the end of the reporting period, all of the Company's factories were not located in or adjacent to water resource protection areas, and no negative events occurred that affected local water sources due to water extraction and discharge.



# Chemical Safety Management

In accordance with national and local laws, administrative regulations and local regulations such as *the Regulations on the Safety Management of Hazardous Chemicals, the Regulations on the Management of Precursor Chemicals, the Regulations on the Management of Controlled Chemicals, the Catalogue of Hazardous Chemicals, the Classification and Variety Catalogue of Precursor Chemicals, the Catalogue of Hazardous Chemicals that are Easily Used to Make Explosives, and the Catalogue of Highly Toxic Substances*, the Company has established a chemical management system including *the Environmental Management Substance Control Specifications, the Chemical Management System, the Hazardous Chemical Management System, the Major Hazard Source Management System, and the Precursor Chemical Management System*. It has formed a chemical management ledger, continuously tracked and updated the SVHC list, and has taken chemical safety as the business red line to standardize the management of hazardous chemicals and major hazard sources.

The Company regards chemical safety as its business red line. It has standardized the management of hazardous chemicals, major hazard sources and other tasks, conducted sound safety risk assessments and controls, and focused on the monitoring and management of key segments. Especially in segments such as the storage, transportation, use, and disposal of hazardous chemicals, the Company has strengthened monitoring and management and taken effective measures to ensure these practices are conducted in a safe state. Particularly in the prevention of hazardous chemical accidents and emergency response, the Company has enhanced monitoring and management, formulated detailed emergency plans, strengthened emergency drills, and improved emergency response capabilities, aiming to safeguard employees' safety.

The Company emphasizes the cultivation of safety awareness. Through regular safety education and training, the Company has made employees fully aware of all potential risks posed by hazardous chemicals and the correct methods to respond to emergencies. In addition, the Company has established a sound safety awareness incentive mechanism to encourage employees to voluntarily comply with safety rules and regulations, strengthen safety awareness, and elevate the Company's safety culture.

The Company fundamentally ensures safety by reinforcing safety awareness, strengthening safety risk control, enhancing monitoring and management, and solidifying safety responsibilities, supervision, and inspection. Through the summarization and implementation of these practices, the Company has elevated safety management standards, thereby protecting employees' safety and ensuring the stable operation of facilities.

The Company has consistently monitored high-concern substances related to products, such as ROHS, halogens, and REACH. In accordance with customer requirements and relevant laws, regulations, and standards, the Company has conducted screening tests and submitted test reports and results to customers to ensure the legal and compliant chemical safety practices.

## Chemical safety commitment

We strictly follow the laws and regulations on environmental management substances such as RoHS and REACH. During the new product development stage, we value the environmental and health attributes of the products, upgrade product health and safety standards, look for more environmentally friendly raw materials to replace hazardous chemicals, and report progress to stakeholders, especially strengthen the awareness of chemical safety to customers and users, so that users have the greatest right to know about the chemical substances in the products.

We promise that

When purchasing chemicals that are easy to make drugs or explosives, the Company's Procurement Department shall register the types and quantities to be purchased with the local regulatory authorities before purchasing, while the User Department shall assist the Procurement Department in preparing the instructions for use, purchase quantity and other information of the controlled chemicals, and identify the hazardous chemicals that may be involved based on various standards and specifications, with the identification scope covering all segments such as R&D, production, supply, storage and packaging.

**Hazardous chemicals stored and used by the Company**

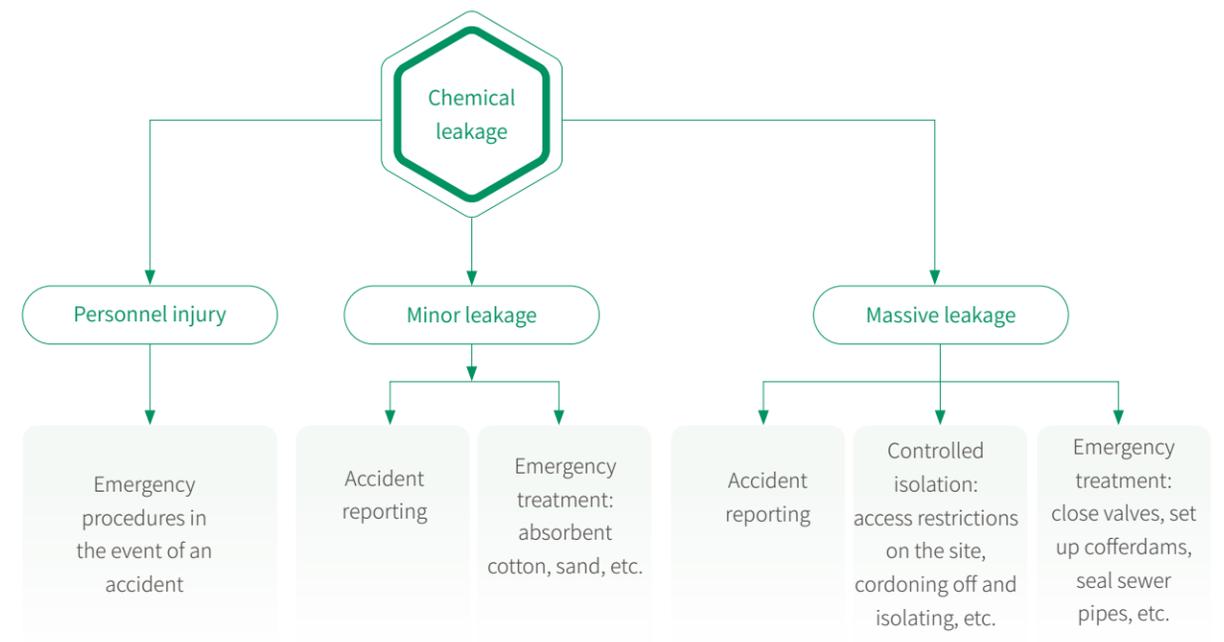
Nitrogen, natural gas, helium, argon, liquid argon, helium-nitrogen mixture, argon-methane gas, hydrogen-argon mixture, acetylene, oxygen, diesel, hydrochloric acid, nitric acid, hydrofluoric acid, perchloric acid, toluene, alcohol, acetone and quinoline.



**The Company conducts hazardous chemical test for**

The identification scope covers all products, including key substance elements, including Sb, PFOS, PCBs, PFOA, halogens and restricted substances in the RoHS standard: Pb, Cd, Hg, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP. All tested substances **met the standards and passed the test.**

In accordance with the requirements of laws and regulations, the Company has established an Emergency Management Process for Chemical Leakage, and actively carried out emergency drills and awareness training, so as to improve employees' emergency response capabilities for chemical leakage, enhance cooperation and communication among relevant departments during emergency responses, resolutely prevent accidents, and protect the lives and property of the Company's employees and stakeholders.



Emergency Management Process for Chemical Leakage

In 2024

The Company **did not have** any negative events such as chemical leakage.



# Advocate Green Operations

The Company continues to improve its green operation system, taking ecological and environmental protection as an important driving force for management upgrades. The Company has strengthened the environmental awareness of all employees through systematic energy conservation measures, comprehensively reduced carbon emissions from daily office work to production and manufacturing, reduced the negative impact on the operating site and surrounding environment, and contributed Shanshan's strength to the low-carbon transformation.

## Green Office Environment

The Company advocates the concept of green and environmental protection. By combining technological innovation with full participation of employees, the Company adopts environmental protection training activities and regular publicity and guidance to enhance the awareness of green operations, energy conservation and environmental protection, form a sustainable operation model, practice the concept of green operation, and systematically reduce environmental footprints to achieve both operational cost reduction and environmental benefits.



Issue a Conservation Proposal to all departments, calling on all employees to start from the little things around them, establish a conservation awareness, reduce waste in terms of saving electricity, water, supplies and oil, and practice sustainable office.

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Awaken employees' environmental awareness through measures such as electricity and water conservation publicity and customized environmental protection posters. Reduce the use of office supplies by printing documents on both sides and canceling offline sign-in sheets.

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Advocate green office for all employees, use conference systems for remote meetings, encourage employees to bring their own cups to conference rooms, reduce paper cups and bottled water, limit the temperature of air conditioners, and actively carry out garbage sorting and recycling.

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Standardize water and electricity consumption and official vehicles, install more photovoltaic street lights, use electric forklifts instead of diesel forklifts for cargo transportation within the factory, set up a security patrol system, and arrange security patrols to avoid idling of lighting equipment, save energy, reduce consumption and save costs.

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Adopt various forms to publicize the concepts of green operation and clean production, including holding training courses for the entire institute, organizing centralized learning and self-study, carrying out rationalization proposal activities, organizing exchanges and interactions between technical experts and employees, etc., so as to instill green concepts throughout the factory.

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Actively promote green office, create a good atmosphere of "everyone talks about saving, everything talks about saving, and all the time talks about saving", and carry out the "Four Ones" activity: save one kilowatt-hour of electricity, one drop of water, one drop of oil, and one piece of paper, with extensive participation of all employees.

Green Activities and Initiatives

### Case

**Shanjin Optoelectronics (Zhangjiagang) organized and participated in an environmental quiz contest**

In June 2024, Shanjin Optoelectronics (Zhangjiagang) organized and participated in the "World Environment Day" quiz competition with the theme of "Beautiful China, I am an Actor" to popularize environmental protection knowledge to employees and promote the co-construction of a green ecosystem.



Publicity Poster for the Quiz Contest

### Case

**Shanjin Optoelectronics (Guangzhou) carried out garbage classification publicity activities**

In order to enhance employees' environmental awareness, in 2024, Shanjin Optoelectronics (Guangzhou) carried out garbage classification publicity activities, introducing the importance of garbage classification, specific classification methods and practical operation skills to participating employees, and interacted with employees to enable employees to have a deeper understanding of garbage classification and environmental protection work.



Garbage Classification Publicity Activities



## Ecological and Environmental Protection

The Company attaches great importance to the construction of a beautiful China. Although the Company's operations have little impact on biodiversity issues, during the site selection and construction period, the Company will carry out environmental assessments in accordance with laws and regulations, and will avoid ecological protection red line areas, nature reserves and other areas with important ecological functions or sensitive and fragile ecological environments for production and operation sites. At the same time, the Company uses tree species that have an air-purifying effect to beautify the production plant and the environment of the factories. In the future, the Company will further integrate ecological and environmental protection into the Company's production and operations in a systematic manner from multiple perspectives, including its own production and operation characteristics, ecological and environmental management requirements, impact on the environment, and affected public.



## 03 Develop Technology and Innovation

### Ideas

Shanshan is committed to promoting sustainable development through green technology innovation and application, while adhering to quality responsibility, meeting customer needs with high-quality products and services, winning market recognition, and taking multiple measures to continuously enhance the Company's core competitiveness. It has set a benchmark for the green development of the industry, and demonstrated the Company's innovative spirit and social responsibility in the context of the new era.

### Our actions

- Innovation and R&D driven
- Strict quality management
- Response to customer needs

# Develop Innovation and R&D

Shanshan has always taken technological innovation as its core driving force, and is committed to promoting sustainable development of the Company through technology R&D and intellectual property management. At the same time, it adheres to the bottom line of scientific ethics to ensure that technological innovation and social responsibility are given equal importance, which not only lays the foundation for the Company's long-term competitiveness, but also contributes positive forces to industry progress and social sustainable development.

## R&D Management

The Company takes clean technology innovation as its core strategy, attaches great importance to technology R&D and management, and is committed to promoting sustainable development through technological innovation. To this end, the Company has established a complete R&D management system to ensure the efficient implementation of innovation activities, and continued to increase R&D investment to accelerate technological iteration and breakthroughs, providing solid technical support for the Company's high-quality development.

**Improve R&D efficiency**

Improve R&D efficiency and innovation capabilities by optimizing R&D processes and resource allocation.

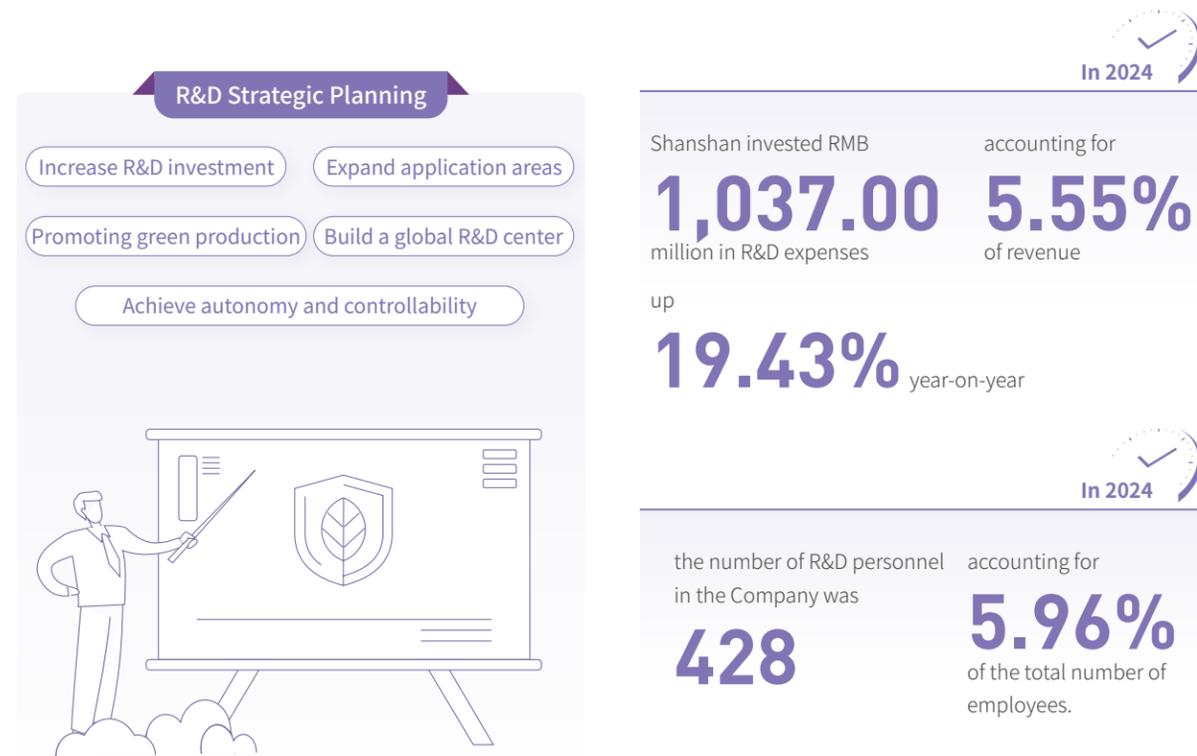
**Cultivate a high-quality team**

Strengthen talent training and introduction to build a high-quality and professional R&D team.

**Strengthen intellectual property protection**

Strengthen intellectual property management and protection to safeguard the legitimate rights and interests of the Company's technological innovation.

R&D Strategic Goals



## R&D Results

The Company has always regarded technological innovation as the core driving force for corporate development, and is committed to promoting breakthroughs and upgrades in business areas through continuous technological research and development, providing solid support for the Company's high-quality development. As a global leading supplier of lithium battery materials and polarizers, the Company relies on its technological accumulation and deep insights in the fields of new energy materials and display materials, continuously increases its R&D investment, and successfully achieves a number of key technological breakthroughs, injecting strong impetus into the industry's technological progress and green transformation.

**Case** **Shanjin Optoelectronics Laboratory obtained CNAS Certification, demonstrating a new level of industry testing**

In April 2024, Shanjin Optoelectronics Nanjing Laboratory successfully obtained the accreditation of the China National Accreditation Service for Conformity Assessment (CNAS) with its outstanding testing capabilities, strict quality control and efficient system management, and was awarded the CNAS Laboratory Accreditation Certificate, and also obtained the International Mutual Recognition Joint Accreditation Mark.




CNAS Certification

**Case** **Shanjin Optoelectronics launched the "Eco-Friendly Polarizer" product and obtained the SGS Green Mark Certification**

Shanjin Optoelectronics has actively developed and applied clean technology in the field of polarizers. In 2024, it obtained the SGS Green Mark Certification for its independently developed "Eco-Friendly Polarizer" product with a high bio-based carbon content of up to 32%, making a major breakthrough in the field of environmental protection and contributing more wisdom and strength to promoting the green development of the market.



SGS Green Mark Certification

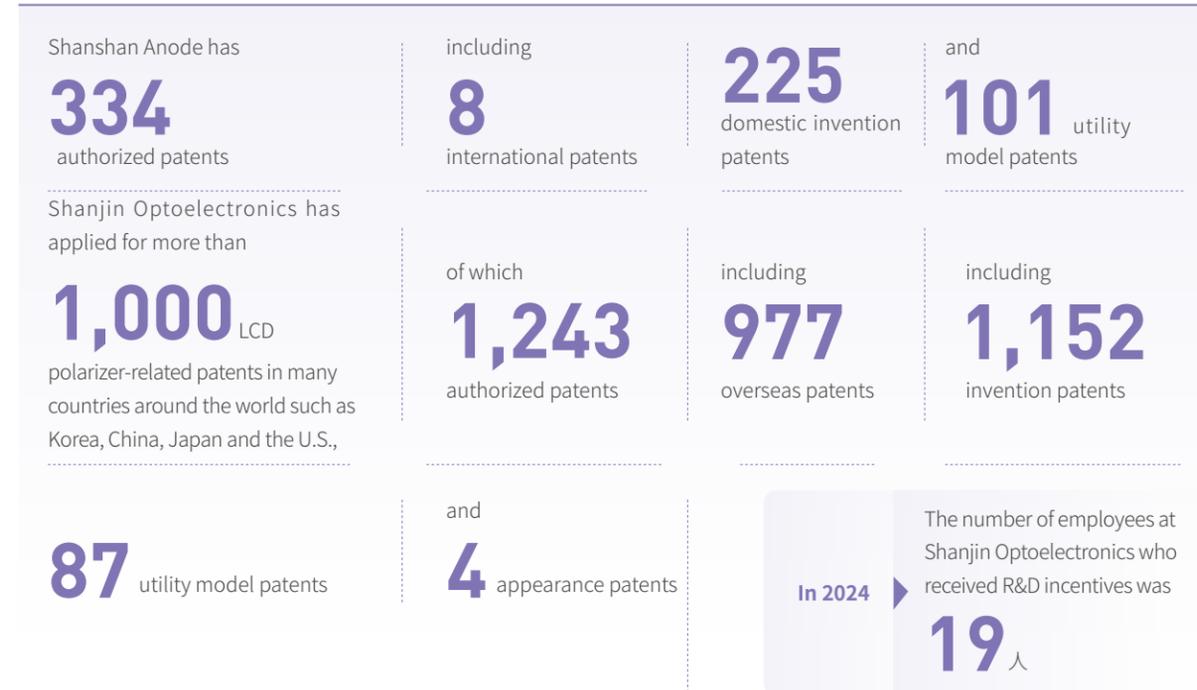
## Intellectual Property Management

The Company attaches great importance to the management and protection of intellectual property. By continuously improving the construction of the intellectual property system, it has established a professional patent management team, formulated and implemented the systems such as the Intellectual Property Management Measures, Patent Application Management Procedures, Trade Secret Protection System, and Patent Management System, built a comprehensive and complete intellectual property management system, and obtained authentication certificate. In addition, the Company has implemented measures such as inventor rewards and actively carried out patent knowledge training, which has not only stimulated employees' enthusiasm for innovation, but also enhanced their awareness of intellectual property compliance protection, achieving the dual-wheel drive of technological innovation and management innovation.



Authentication Certificate of Intellectual Property Management System of Shanshan Anode

As of December 31, 2024



**Case** Shanshan Anode carried out intellectual property training for full-time personnel

In March 2024, Shanshan Anode invited a third-party instructor to organize 32 hours of professional training for full-time intellectual property personnel on the theme of intellectual property management when enterprises enter overseas markets, aiming to strengthen the professional ability level of Shanshan Anode's intellectual property security management team and help improve overall intellectual property management.

## Scientific Ethics

The Company always regards scientific and technological ethics as the core principle of corporate development, strictly abides by scientific and technological ethics standards in the process of R&D, operation and innovation, ensures equal emphasis on technological development and moral responsibility, ensures the transparency and traceability of technological applications, and avoids abuse or misuse of technology. The Company aims at promoting social progress and sustainable development in all technological innovations, giving priority to environmentally friendly technologies and reducing the consumption of natural resources and damage to the ecosystem.

## Strict Quality Management

Shanshan regards quality and reputation as the foundation of its development, always adheres to a customer-centric approach, and is committed to providing customers with high-quality products and excellent service experience. The Company strictly abides by relevant domestic and international laws and regulations, fully implements international quality management system standards, and ensures that its products and services are always at the leading level in the industry through standardized and refined management processes. In 2024, Shanshan Anode and Shanjin Optoelectronics both obtained ISO 9001 Quality Management System Certification, continued to improve the Quality Management System Certification, and continuously improved product quality.



ISO 9001 Quality Management System Certification for Shanshan Anode (left) and Shanjin Optoelectronics (right) (selected)

## Shanshan Anode

Shanshan Anode adheres to its own quality benchmark, takes meeting customer needs as its mission, pursues zero-defect standards, and formulates Quality, Environment, Occupational Health and Safety Management Manual, Product Manufacturing Control Procedure, Non-conforming Product Management Control Procedure, Continuous Improvement Control Procedure, etc. in accordance with international quality management system standards such as IATF 16949 and ISO 9001, ensuring that every segments from project initiation to product delivery is subject to strict quality control. It also actively carries out quality management training and activities to effectively improve the overall quality of products, thereby enhancing customer satisfaction and trust.

**Quality Policy of Shanshan Anode**

The Company has built Shanshan Technology as a global brand. Cherish quality and reputation as the life of the enterprise, and provide customers with high-quality products and perfect services. Fulfill all commitments, continuously innovate and improve, and achieve and exceed customer expectations. Become an industry benchmark in the lithium-ion battery anode material sector, and promote the development of new energy business.





ISO 9001 Certification of Shanshan Anode, IATF 16949 System Certification of Shanshan Anode

Case

Shanshan Anode carried out publicity on foreign matter management regulations to increase customer satisfaction

In October 2024, Shanshan Anode Quality Department took the lead in organizing special training on foreign matter management in anode factories, focusing on the management and control standards of magnetic materials, covering 150 key employees in multiple departments such as Production Department, Quality Department, Testing Department, Equipment Department and PMC, promoting the penetrating implementation of standards and cross-departmental collaborative execution, and laying a solid foundation for product consistency control.



Publicity on Foreign Matter Management Regulations

Case

Shanshan Anode launched a series of quality month activities to lay a solid foundation for quality improvement

Shanshan Anode actively launches a series of quality month activities every year. Through diverse quality activities such as improvement topics, knowledge competitions and special lectures, it enhances the quality awareness of all employees, enhances quality knowledge, improves quality problems, and improves customer satisfaction. From September to November 2024, Shanshan Anode and its factories in regions held three special lectures and conducted online training through live broadcast software, with the lecture topics including First Principles, Management Methods and Applications of Metal Foreign Matter, and Introduction to Long-life Artificial Graphite Technology and Analysis of Key Indicators, which consolidated and enhanced the professional knowledge of employees and laid a solid foundation for future quality improvement.



Special Lecture on Quality

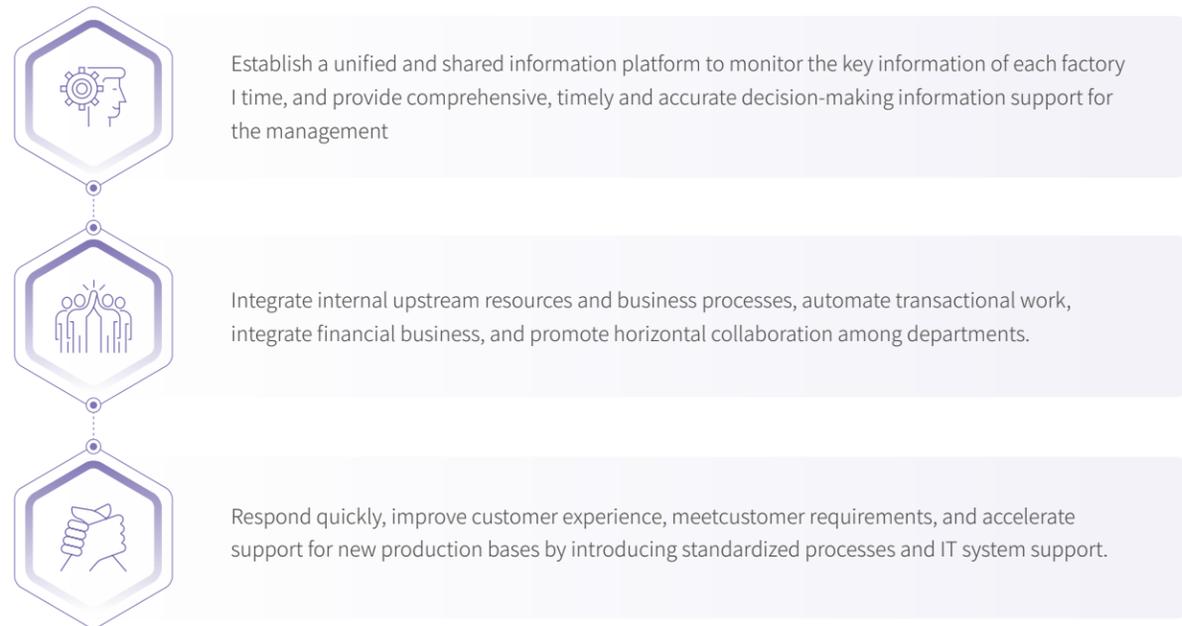
Shanjin Optoelectronics

Shanjin Optoelectronics combines ISO 9001 and IATF 16949 with the quality operation system and compiles the Quality Operation Manual, clarifying the procedures for the responsibilities and authorities of each quality business activity and minimizing the impact of quality problems in business activities, with its production achieving the highest quality competitiveness recognized by customers. In order to ensure product quality, the Company has implemented full life cycle quality management, strictly controlling every segments to ensure the stability and reliability of product quality.



## Digital and Intelligent Transformation

Digital management, intelligent production and comprehensive digital transformation have become key strategies for enterprises and industries to achieve sustainable development and enhance core competitiveness. To this end, the Company has built a comprehensive and in-depth digital management system, deployed management goals to improve operational efficiency and data-driven decision-making, promoted the production model to move towards intelligentization, and strived to achieve simultaneous growth in corporate value and social contribution through the implementation of holistic and systematic digital transformation.

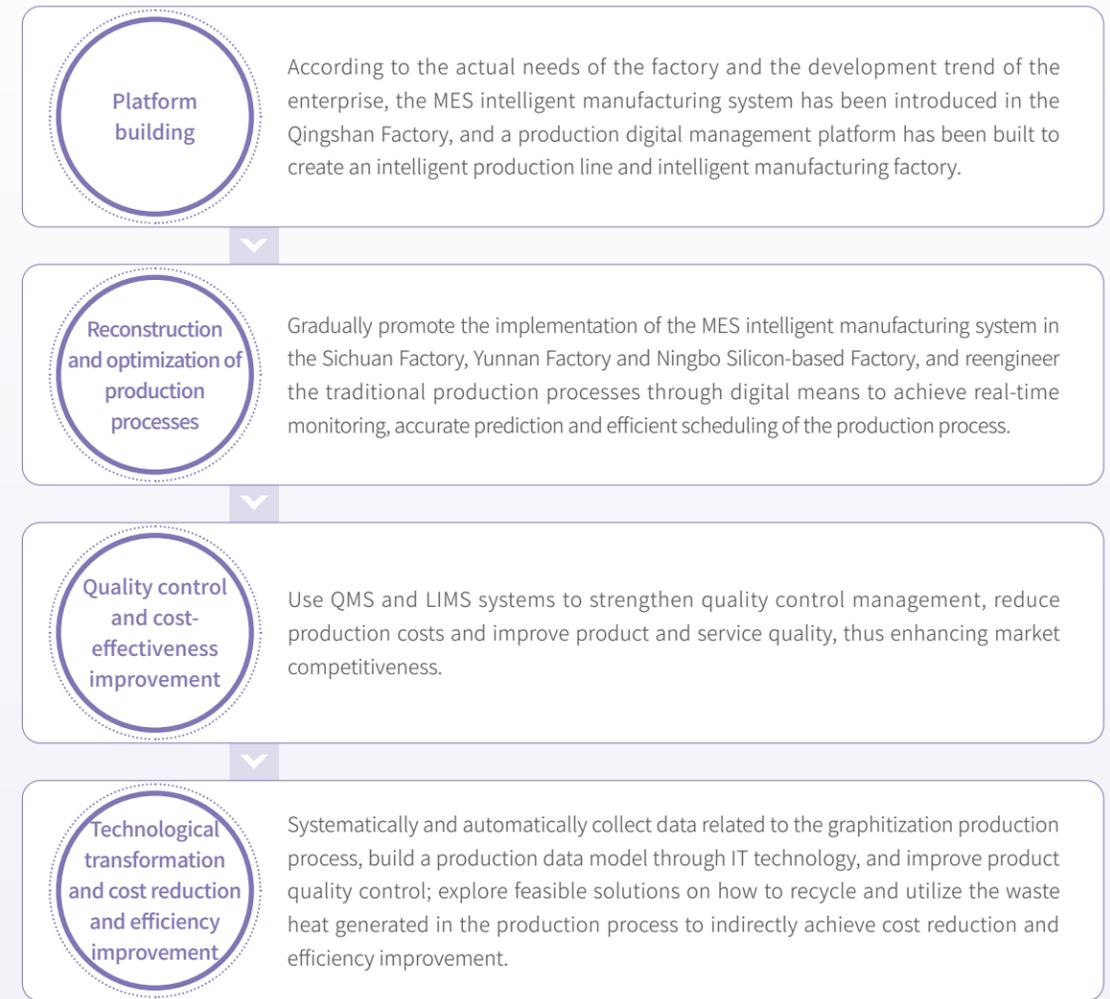


Vision of Digital Transformation



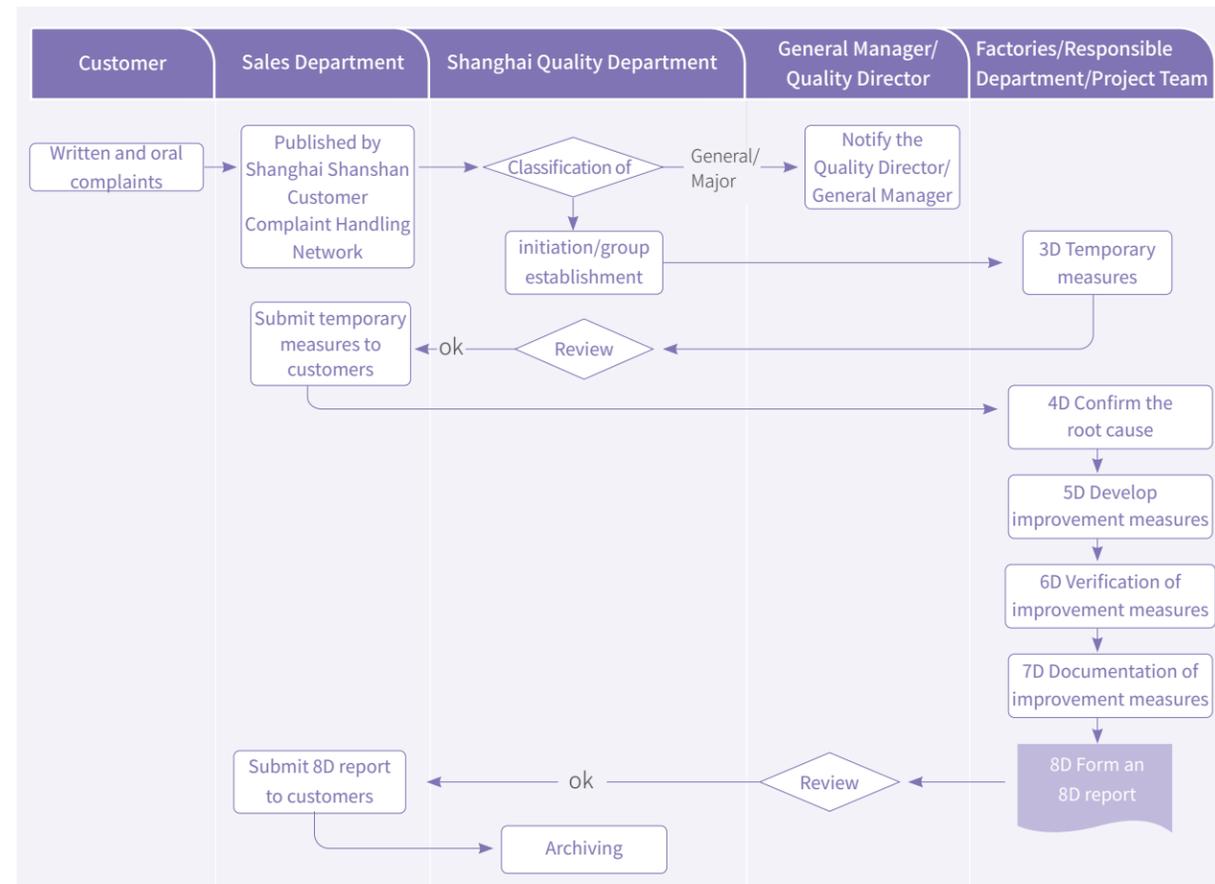
### Case **Intelligent production strategic planning of Shanshan Anode**

Shanshan Anode regards information management, intelligent production and digital transformation as the core strategy for the Company to seek sustainable development and enhance competitiveness, and continues to explore and build a comprehensive and in-depth digital management system to promote the transformation of production models towards intelligentization, striving to achieve high-quality growth of the Company and innovation and creation of social value through holistic and systematic digital transformation.

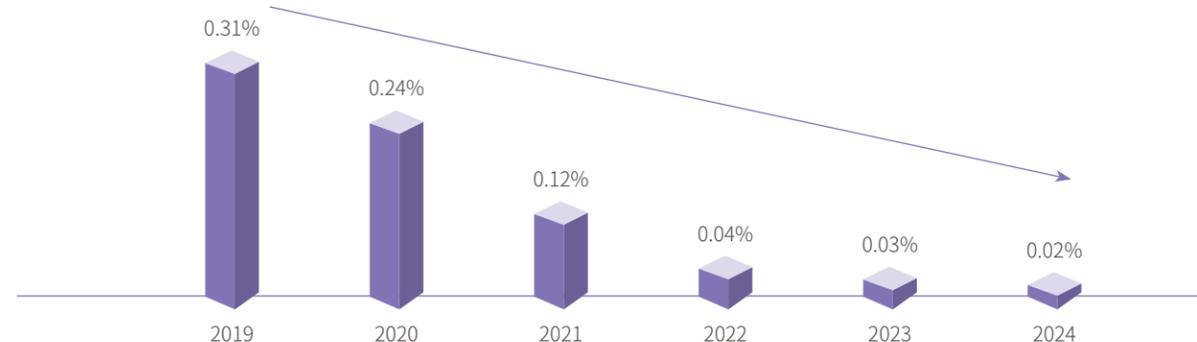


# Respond to Customer Needs

Shanshan always places customer experience at its core, adheres to the concept of all-round customer service, and is committed to providing customers with excellent products and services. Shanjin Optoelectronics has formulated the Customer Complaint Handling Procedure, and Shanshan Anode has formulated systems such as the Customer Satisfaction Control Procedure and Customer Complaint Handling Regulations to build and continuously optimize the customer complaint handling process, actively respond to customer complaints, and shorten response time. At the same time, the Company has set up a special research team for key customers, and mobilized all key departments of the Company to fully cooperate to meet customers' customized needs and continuously improve customer satisfaction. In addition, the Company regularly conducts training on product knowledge, service skills, communication skills, etc. to enhance employees' professional capabilities, optimize customer service processes, effectively reduce customer complaints, and continuously improve customer satisfaction.



Customer Complaint Handling Process



Trends in Customer Complaint of Shanshan Anode from 2019 to 2024

In order to further improve customer satisfaction, Shanshan Anode has formulated and implemented customer satisfaction control procedures, set customer satisfaction goals and conducted customer satisfaction surveys based on the Company's business objectives and customer satisfaction in previous years. In 2024, the Company received wide acclaim from customers and won the trust and recognition of customers with practical actions.



Shanshan Anode and Shanjin Optoelectronics both conducted customer satisfaction surveys, among which: Shanshan Anode's domestic customer satisfaction was

## 95.75

And its overseas customer satisfaction was

## 92.52

Shanjin Optoelectronics' customer satisfaction was

## 93.7

### Key honors



Shanshan Anode won the ATL Carbon Emission Reduction Pioneer Award



Shanshan Anode won the 2024 CATL Quality Excellence Award



Shanshan Anode won the COSMX 2024 Excellent Supplier Award



Shanjin Optoelectronics won the BOE Global Supplier Outstanding Strategic Partner Award



Shanshan Anode won the SVOLT Energy 2024 Excellent Delivery Award



Shanshan Anode won the Sunwoda 2024 Strategic Partner Award



Shanshan Anode won Farasis Energy 2024 Excellent Quality Award



Shanjin Optoelectronics won the LGD Best Partner Award



# 04 Collaboration for Co-existence and Mutual Benefit

## Ideas

Shanshan adheres to the concept of symbiosis and win-win, establishes an ESG governance system covering the entire life cycle of the supply chain, strictly implements conflict mineral control, innovates supplier responsibility management, and enables procurement transparency with digitalization. At the same time, the Company actively builds an all-round strategic cooperation ecological network, deepens collaborative innovation between industry, university and research, leads the co-construction of industry standards, expands the dimension of global technological collaboration, and leads the co-creation of sustainable development value in the industrial chain.

## Our actions

- Supply chain ESG management
- Promote industry development

# Supply Chain ESG Management

Shanshan is committed to building a long-term, high-quality and sustainable supply chain management system. Through the deep integration of supplier management mechanism and ESG concept, it systematically integrates Sunshine Procurement Guidelines and sustainable procurement standards to promote transparency and sustainable development of the entire supply chain. At the same time, the Company has incorporated sustainable procurement training into supply chain management, strive to enhance the social value creation ability of the supply chain, practice social responsibility with partners, and promote the coordinated development and value sharing of the industrial chain.

## Supply Chain Security

The Company has established and continuously optimized the systems of Procurement Policy, Supplier Management, Review, Selection and Development of Suppliers, etc., and standardized the full life cycle management process of review, selection, development, assessment and exit of suppliers. It also established a Procurement Committee to conduct procurement assessments on major procurement, development and selection of major suppliers, procurement of major projects and major procurement decisions, and used digital means such as the SRM system to improve management efficiency and quality. Before introducing suppliers, the Company conducts thorough due diligence on the supplier's ESG practices, technical strength and quality control levels to prevent potential risks. For existing suppliers, the Company is committed to empowering them, requiring them to implement continuous improvement plans and encouraging them to actively participate in capacity building plans.



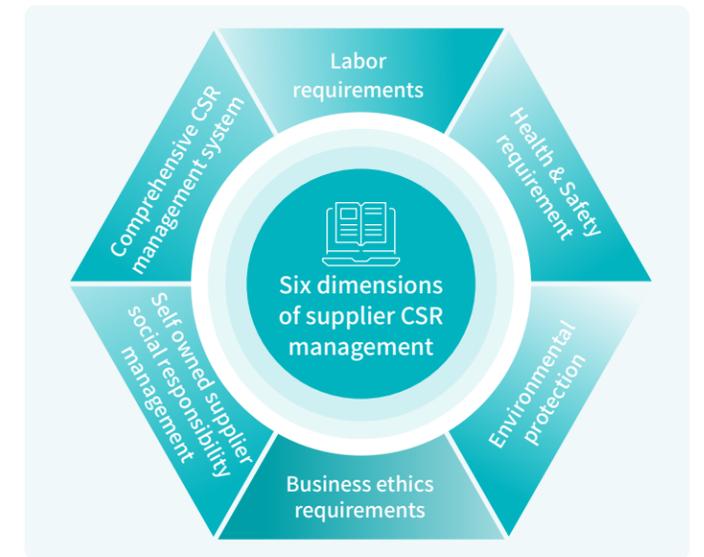
The Company has established a supplier evaluation system, according to which the Procurement Committee organizes relevant departments to conduct reviews of suppliers for each delivery, each month and each quarter based on their quality, price, delivery, technology, professional ethics, etc., and requires suppliers to issue and implement continuous improvement plans in accordance with the Company's requirements, enabling the common development of suppliers and the Company. The Company will include qualified suppliers in the Qualified Supplier List and actively establish supply strategic alliances with them; if a supplier continues to fall under quality problems or delivery problems, or harm the Company's interests, etc., the Company will include it to the Supplier Blacklist, activate the supplier exit mechanism to immediately stop or no longer do business with it, and take measures to eliminate the adverse effects. The Company uses a scientific and rigorous evaluation mechanism to promote sustainable cooperation and ensure the safety and reliability of the supply chain.

## Responsible Procurement Management

The Company is committed to promoting the construction of supply chain ESG. It has formulated the Supply Chain Due Diligence Policy, established the Supply Chain Due Diligence Committee to inspect and supervise the ESG work of the entire chain, required suppliers to refer to ISO 14001, ISO 45001, SA 8000, EICC and ISO 26000 requirements, established and effectively operated the corporate social responsibility (CSR) management system, committed to not using conflict minerals, and worked with various partners to promote the sustainable development of the industrial chain.

## Supply chain ESG management

The Company has signed the Code of Conduct for Suppliers, Corporate Social Responsibility Implementation Agreement with its suppliers, and requires suppliers to provide raw materials and parts and components that have passed the Green Product Certification and comply with ROHS and REACH. Under the same conditions or under specific conditions, the Company gives priority to products from suppliers that have passed relevant Environmental Quality System Certification. At the same time, the Company also attaches importance to the responsibility management of contractors, and reaches agreements with contractors in terms of construction qualifications, safety and environmental protection.



- Require contractors to have corresponding construction qualifications, safety production qualifications, and personnel qualification certificates.
- Sign the Contractor Safety Agreement to clarify the systems that need to be followed and the measures for safe implementation.
- Conduct safety and environmental protection education before entering the factory for construction.
- Inspect and supervise safety and environmental protection measures during construction.
- Assess the supervisor's safety supervision over the contractor.



Contractor Responsibility Management Mechanism



Shanshan Anode and Shanjin Optoelectronics's coverage rate of suppliers that have signed the Code of Conduct for Suppliers was

**100%**

The Company attaches importance to the empowerment of supply chain ESG management and formulates training plans. It conducts sustainable procurement training for the relevant person in charge of supply chain at least once a year to deepen the awareness of sustainable procurement, and ensure the adequacy, rationality and effectiveness of supply chain ESG management.



Shanjin Optoelectronics conducted sustainable procurement training for

**8** relevant employees

totaling

**8** hours

And the proportion of internal procurement personnel who passed the sustainable procurement training was **100%**

### Ethical Procurement

The Company signs Business Ethics Agreement, Confidentiality Agreements and Business Ethics Commitment Letters with suppliers to eliminate the risks of corruption and information leakage, clarifying the reporting channels in the contracts, and requiring suppliers to strictly abide by the requirements of integrity, ethics and confidentiality. Similarly, the Company requires all procurement personnel to comply with and sign the Letter of Guarantee for Procurement Personnel to avoid any behavior that conflicts with the interests of the Company and maintain and enhance the Company's business reputation, ensuring that suppliers enjoy open, fair and equal treatment during the transactions, and promoting the healthy development of the supply chain.

### Conflict Minerals Management

Shanshan Anode attaches great importance to conflict minerals management, clearly requiring suppliers to commit to complying with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act regarding legal requirements for responsible mineral supply chains. The Company has recognized the potential risks of significant adverse impacts associated with mineral resource mining, trading, processing, and export in conflict-affected and high-risk areas, and acknowledged its obligation to respect human rights, avoid contributing to conflict, and prevent negative environmental and social impacts.

In addition, Shanshan Anode has required that suppliers shall establish policies to reasonably ensure that the natural graphite contained in their manufactured products does not directly or indirectly fund or benefit armed groups responsible for severe human rights violations in the Democratic Republic of the Congo or adjoining countries/regions. Furthermore, the Company has formulated the Responsible Minerals Procurement Assessment Form and required suppliers to complete the Form for self-assessment of conflict minerals risks, and each supplier has undergone a systematic conflict minerals risk assessment through the Supplier Basic Information Form, Regional Risk Assessment Form, and CAHRAs Risk Early Warning Identification Form.

## Promote Industry Development

As an industry-leading benchmark enterprise, the Company prioritizes continuous enhancement of its technological innovation and scientific research achievement commercialization capabilities. It fulfills the social responsibilities of a leading enterprise by collaborating with global industry leaders ranging from upstream to downstream supply chains, actively partnering with universities, maintaining strong cooperation and communication with all related parties, cultivating high-caliber technical talent, and promoting industry chain standardization and industry development. It strives to become a global leader in key segments of lithium battery anode materials and polarizers.

### Industry-University-Research Cooperation

The company firmly believes that university-enterprise collaboration is one of the key drivers to promote industry development. It relentlessly explores new university-enterprise cooperation models, combining academic resources from universities with its own technical expertise and capabilities. Through a series of industry-university-research projects with universities and research institutions, the Company facilitates the transfer and commercialization of scientific achievements while nurturing industry talent and advancing high-quality industry development based on the industry-university-research cooperation model.

#### Case Shanjin Optoelectronics and Nanjing University drove industry development with fundamental research

On the afternoon of August 16, 2024, Shanjin Optoelectronics and Nanjing University held a project progress report and research discussion session at Nanjing University Xianlin Campus. Nanjing University's project team and representatives from Shanjin Optoelectronics attended the event. Through industry-university-research cooperation, Shanjin Optoelectronics accelerated industrial deployment and promoted the application of scientific achievements from the collaboration between the Company and universities.

### Participation in Drafting Industry Standards

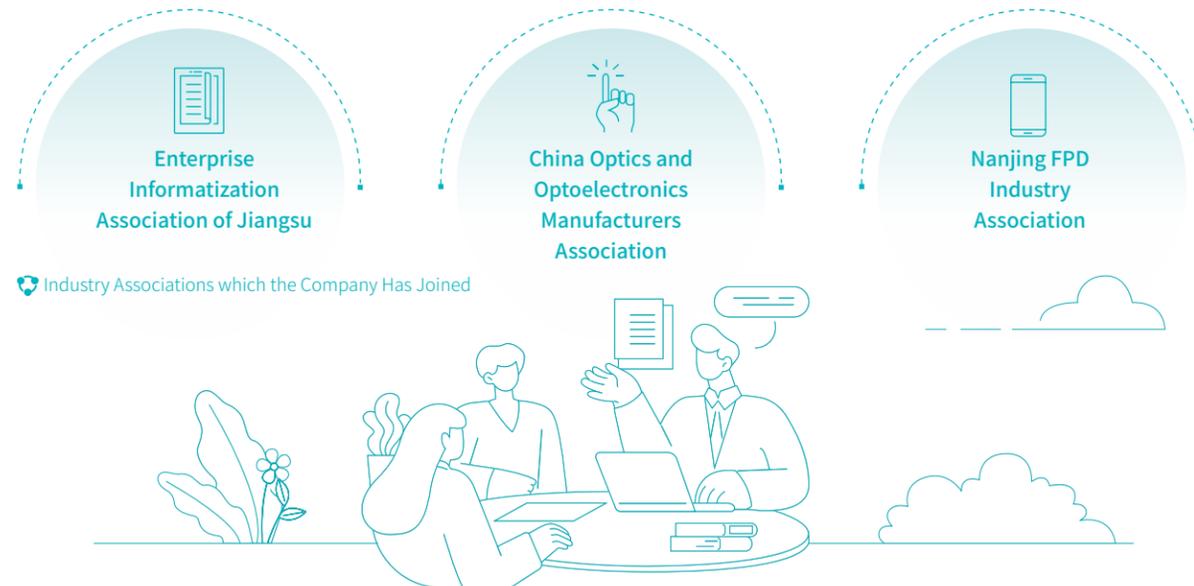
Leveraging its advanced technology and extensive industry experience, the Company actively participated in the development of national, industry, and organization standards, and research projects, providing critical support for standardized and high-quality development of the industry. As of the end of 2024, the Company had led or participated in the formulation of a total of 9 national, industry, and organization standards.

	Standard name	Standard level
Shanjin Optoelectronics	Low Moisture-Permeability Polarizer for Thin-Film Transistor Liquid Crystal Displays (TFT-LCDs)	Industry standards
	Polarizers for Small-to-Medium Sized Organic Light-Emitting Diode (OLED) Displays	Industry standards
	Polarizers for Organic Light-Emitting Diode (OLED) Televisions	Industry standards
Shanshan Anode	Sample Method of Carbon Material (National Standards)	National standards
	Soft Charcoal	National standards
	Oil-Based Needle Coke	National standards
	Mesocarbon Microbeads (MCMB)	National standards
	Coal-Derived Needle Coke Mesophase Pitc	Industry standards
	Guidelines for the Whole-Process Management of Intellectual Property Rights in Enterprise R&D Institutions	Organization standards

Standards Co-developed by the Company

## Industry Conferences and Exchanges

In the course of its continuous development, the Company has maintained close ties with industry associations, leveraging its advantages as a member unit to actively participate in major international exchange events such as alliances, forums, and summits. It collaborated with leading domestic and international enterprises to foster mutual growth, enhanced communication and coordination with associations, supported industrial technological innovation development, and contributed to the sustainable and low-carbon development of the industry worldwide.



Industry Associations which the Company Has Joined

### Case Shanshan Anode attended the Sustainable Battery Value Chain Reception in Finland, jointly building a green European supply chain

In June 2024, Shanshan Anode was invited to attend the Sustainable Battery Value Chain Reception in Finland. General Manager Ding Xiaoyang delivered a speech on behalf of the Company, highlighting the integrated anode material project with an annual capacity of 100,000 tons in Finland. During the event, Shanshan Anode engaged in in-depth discussions with representatives from the Finnish government and enterprises on clean energy transition pathways, demonstrating the technological capabilities and responsibility of Chinese enterprises in the global carbon neutrality process. The Company also outlined how the project, upon completion, would leverage its integrated global capacity synergies to drive the industry toward low-carbon and large-scale development.



General Manager of Shanshan Anode Delivers a Speech

### Case Shanjin Optoelectronics attended the China-South Korea Economic and Trade Cooperation Exchange, deepening supply chain collaborative innovation

In June 2024, Shanjin Optoelectronics, as a representative enterprise of Jiangsu Province, was invited to attend the China (Jiangsu)-South Korea Economic and Trade Cooperation Exchange. The Company presented its strategic achievements, launched new technological products, and shared cooperation experiences. Zhu Zhiyong, President of Shanjin Optoelectronics, delivered a speech titled "Mutual Commitment and Hand-in-Hand Progress" as a representative of Jiangsu enterprises. The event showcased innovative achievements from Chinese and Korean enterprises' joint R&D, including extra-large-size OLED TV polarizers and wide-view-angle on-board display solutions, as well as sustainable development practices such as smart manufacturing line upgrades and eco-friendly product R&D. This event not only strengthened the Company's strategic collaboration with South Korean display giants such as LGD and Samsung but also provided a replicable ESG cooperation model by demonstrating green production technologies and low-carbon product R&D achievements.



Shanjin Optoelectronics Attended the China-South Korea Economic and Trade Cooperation Exchange

### Case Shanjin Optoelectronics attended the DIC EXPO 2024, leading a brilliant future with innovation

In July 2024, Shanjin Optoelectronics exhibited numerous innovative products at the Display Innovation China Expo 2024. The Company prominently featured two core strategic products, namely OLED polarizers and high-end automotive polarizers, demonstrating to attendees its strategic transformation and key development directions in recent years. In addition, Shanjin Optoelectronics won multiple awards, including the Gold Medal for Display Material Innovation, highlighting its strength in driving the display industry toward higher quality and more eco-friendly development.



Shanjin Optoelectronics Attended the DIC EXPO 2024



# Investing in 05 Talents and Advancing as One

## Ideas

Shanshan regards human capital as a core element of sustainable development. By building a comprehensive growth platform to empower employees' career development, the Company has deeply integrated its talent strategy into the high-quality development process. Adhering to a people-oriented philosophy, the Company systematically advances rights protection mechanisms and career development systems. Through customized training programs and tiered promotion channels, the Company unlocks individual potential, continuously optimizes its compensation and benefits system, and is committed to fostering a symbiotic ecosystem where employee value and corporate value grow and thrive together.

## Our actions

- Employment, rights and interests of employees
- Employee development and training
- Employee care and activities
- Occupational health and safety

# Employment, rights and interests of employees

Shanshan strictly adheres to the Labor Law and other relevant laws and regulations. In addition, the Company has established a series of internal policies including the Corporate Social Responsibility Management Manual, Anti-Discrimination Regulations, Child and Adolescent Labor Management Policy, Labor Management Objectives and Procedures, and Personnel Recruitment System. Furthermore, the Company has newly implemented a Workers' Rights Protection Policy, setting labor management objectives that fully comply with national laws and regulations, industry standards, corporate labor policies, and client requirements. These objectives undergo semi-annual reviews and annual updates to optimize talent management, enhance employee satisfaction and professional capabilities, and ultimately drive the Company's sustainable and stable development.

## Objectives of Employee Management

- Leadership index
- Child labor prevention
- Anti-discrimination and anti-harassment
- Freedom of association
- Freedom of occupational choice
- Working time management
- Compensation and benefits
- Other laws, regulations, industry standards and customer requirements

## Equality and Diversity

The Company adheres to fair, just and transparent recruitment and employment policies, committing to prohibit the employment of child labor and resist forced labor in all employment practices including hiring, compensation, training, promotion, rewards, benefits or retirement, while maintaining a zero-tolerance stance towards any form of discrimination and unfair competition. The Company continuously expands talent recruitment channels and signs labor contracts with employees on a voluntary basis to safeguard their legitimate rights and interests, maintain a healthy labor market order, and respect and protect employees' lawful rights.

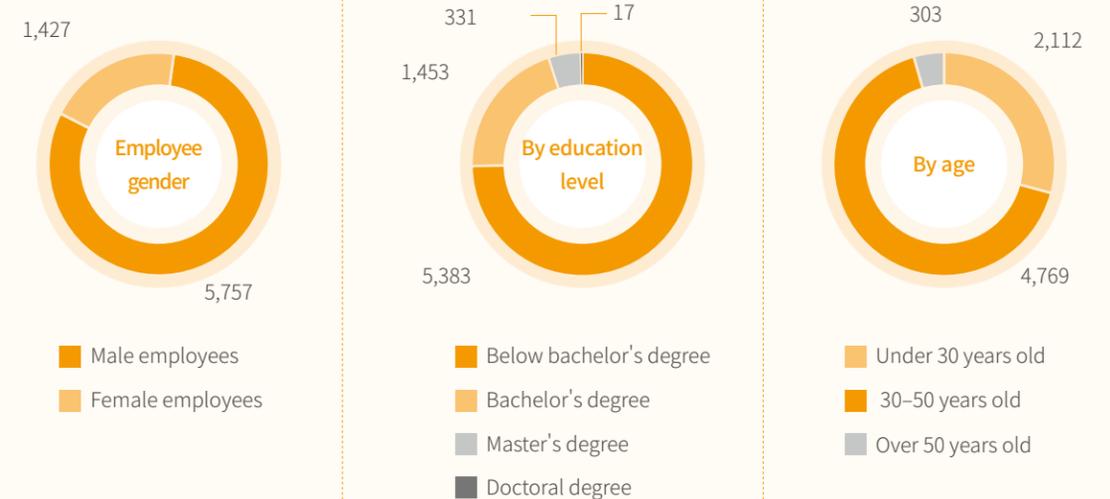
### Talent Introduction Channels

- Human resources network
- Online recruitment
- Talent market
- Executive search
- Internal referrals
- Internal competition
- Veteran placement

As of December 31, 2024

The Company's labor contract signing rate was **100%** Total number of employees was including **7,184** **1,415** new employees

No incidents of forced labor, child labor, or other employee rights violations occurred.



As of December 31, 2024

The Company respects and protects the rights and interests of every employee, strictly prohibiting any differential treatment or discrimination throughout the employment process based on factors including but not limited to race, skin color, age, gender, sexual orientation, gender identity and expression, ethnicity, disability, pregnancy, religion, political affiliation, association membership, protected veteran status, protected genetic information or marital status. The Company ensures that no medical tests or health check-ups with discriminatory purposes are conducted. In addition, the Company accommodates employees' religious beliefs by providing reasonable arrangements for religious activities upon request.

The Company had **335** ethnic minority employees

**43** employees with disabilities

and **32** foreign employees

## Protection for Female Employees

The Company prioritizes safeguarding the rights and interests of female employees by establishing policies such as the Regulations on Labor Protection for Female Employees, ensuring equal pay for equal work between male and female employees, equal employment and promotion opportunities, provision of humanistic care for female employees, and establishment of a female-friendly workplace environment. Furthermore, the Company's trade union has established a Female Employees Committee and incorporated protections for female employees' rights and interests into the Collective Bargaining Agreement, actively safeguarding and advocating for the special interests and lawful rights of female employees.



The Company had **90** female R&D personnel

with female employees accounting for **28.15%** of middle management

and **23.60%** of senior management



### The Company's Measures to Protect Female Employees' Rights and Interests

Prohibit compulsory pregnancy tests or contraception requirements as employment conditions, and forbid termination of employment due to pregnancy

Implement special leave policies for female employees to safeguard their due rights and interests

Grant half-day leave on International Women's Day and present exclusive gifts to female employees

Provide female-specific labor protection supplies

Set up lactation rooms and maternity lounges

Include female-specific examination items in annual health check-ups

.....



### Dedicated Facilities for Female Employees



The Maternity Lounge

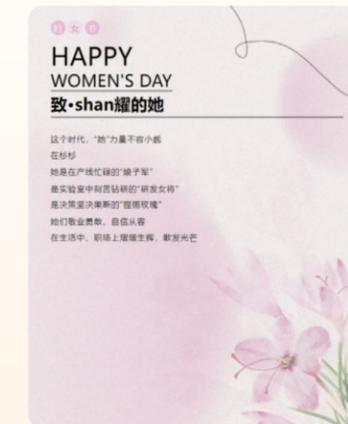


The Lactation Room

### Case

### Showcasing "her" power to highlight Shanshan female employees' abilities

In March 2024, the Company invited a number of female managers and scientific research personnel to convey professional wisdom through messages, showcasing the breakthrough achievements of female employees in technological innovation and team management. The initiative highlighted the wisdom and resilience of female employees in positions such as technology research and development and production management, adopting a multidimensional narrative of "predecessors' experience + growth path" to continuously empower women's professional growth.



The Showcasing "Her" Power Activity



International Women's Day Event at Shanjin Optoelectronics (Zhangjiagang)

The Company strictly prohibits any threatening, abusive, exploitative, or sexually harassing behavior (including gestures, language, and physical contact) in workplaces, Company-provided or managed residences, and other premises. To prevent any form of discrimination, all employees may submit anonymous reports to the Company to protect them from discrimination, abuse, torture, maltreatment, persecution and other workplace malignant incidents.

<b>Shanjin Optoelectronics</b>	<b>Shanshan Anode</b>
<ul style="list-style-type: none"> <li>Suggestion boxes have been set in the facility</li> <li>Zhengdao Business Station Reporting System &amp; Complaint Platform</li> <li>Hotline: 020-2220-0225</li> </ul>	<ul style="list-style-type: none"> <li>Email for reporting: sskjnk@shanshan.com</li> <li>All factories have set up Chairman/General Manager suggestion boxes, allowing anonymous feedback on various issues through QR code scanning</li> </ul>

 Channels for Reporting Harassment and Discrimination

## Democratic Management

Adhering to the people-oriented principle, the Company has established a trade union system and set up Party branches and youth league branches. It respects all employees' rights to join labor unions and participate in collective bargaining. In addition, the Company has signed the collective bargaining agreement with employees, held employees' congresses regularly, supported freedom of association and collective bargaining, facilitated communication between employees and the Company, and fully safeguarded employees' legitimate rights and interests.

 In 2024

The collective bargaining agreement signing rate of Shanjin Optoelectronics reached

# 100%

### Case Shanjin Optoelectronics (Guangzhou) held the 2nd Trade Union Committee Election

In April 2024, Shanjin Optoelectronics (Guangzhou) held an employees' congress in accordance with the relevant provisions of the Constitution of the Chinese Trade Union and the Regulations on Election Work in Grassroots Trade Unions. At the meeting, the Company conducted a vote to elect members of the 2nd Committee and the Finance Audit Committee of Shanjin Optoelectronics (Guangzhou). At the meeting, the outgoing Chairman of the trade union delivered a work report for the past year and the newly elected Chairman gave a speech. This ensured information transparency and protected employees' democratic rights.



 The Election Begins

The Company values grassroots employee feedback from the daily work and has established multiple communication channels, including the Chairman's mailbox, DingTalk internal messaging and employee face-to-face communication, regularly conducts employee satisfaction surveys, and formulates relevant systems to clarify the channels for labor rights complaints and timely response to employee requests, ensuring that all employees have the right to freely express their opinions without interference, so as to steadily advance democratic management, and enhance employee cohesion.

### Case The Company conducted employee satisfaction surveys for management improvement

Based on the respective operational conditions of Shanshan Anode and Shanjin Optoelectronics, the Company conducted annual employee satisfaction surveys focusing on employees' immediate interests and needs. Through questionnaire research and analysis of survey results, the Company examined its existing management issues, optimized management mechanisms, improved management team capabilities, and safeguarded employee rights and interests.

Shanshan Anode

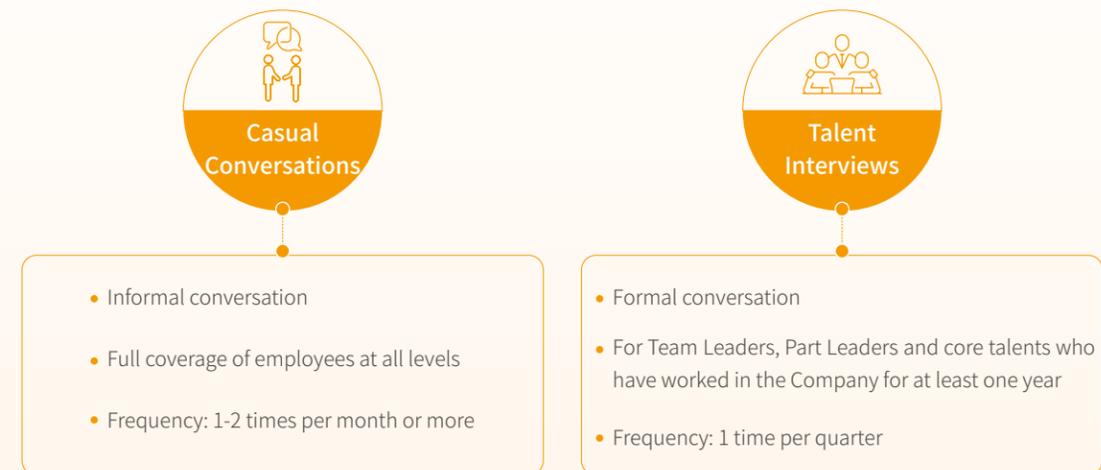
In December 2024, Shanshan Anode conducted an employee satisfaction survey covering multiple dimensions including work environment, working hours, leadership attention, job recognition, colleague relationships, leadership communication, job responsibilities, and work challenges, achieving an **88.7%** participation rate and an overall satisfaction rate of **85.67%**.

Shanjin Optoelectronics

In October 2024, Shanjin Optoelectronics carried out a satisfaction survey evaluating employees' satisfaction with the Company, compensation and benefits, business operations, as well as quality awareness confirmation, resulting in a satisfaction rate of **3.89** out of 5. In addition, in order to further improve the management level, Shanjin Optoelectronics conducted a "Supervisor 360 Survey" on office heads, shift leaders and team leaders, as well as a "Leadership Survey" on non-director leaders, and carried out targeted special improvement training or personal interviews based on the survey results.

### Case Implementation of a new employee interview mechanism to better solicit employee feedback

In February 2024, Shanjin Optoelectronics (Nanjing) added an employee interview mechanism featuring casual conversations and talent interviews to better solicit employee feedback, better understand their daily lives, identify their professional and personal development status, and foster a relaxed and harmonious workplace environment. In 2024, Shanjin Optoelectronics (Nanjing) conducted a total of 356 employee interviews, including 170 casual conversations and 186 talent interviews.



 Shanjin Optoelectronics (Nanjing) Employee Interview Mechanism

# Employee Development and Training

Shanshan adheres to the concept of sustainable development by incorporating talent cultivation into its strategic framework, driving organizational development through its core values of "integrity, responsibility, innovation, and accountability". The Company has established a long-term talent development mechanism, refined its compensation incentive system and career promotion channels, and created a multi-dimensional professional development platform. In addition, the Company focuses on building a learning-oriented organization by implementing customized training programs to enhance employees' professional competencies, aligning individual career goals with corporate strategic visions, and achieving synergistic growth with corporate value.

## Employee Training

The Company has formulated policies such as the Employee Training Management Regulations to establish a comprehensive talent development system that covers all stages of employee growth. Training is conducted flexibly through both online and offline formats, including internal trainers, external experts, and off-site training programs. Assessment methods such as examinations, on-site Q&A, simulation tests, and training reports are adopted to ensure employees acquire knowledge and skills, thereby improving their overall business capabilities, and promoting their professional growth.



Chart Flow of Training Plan Formulation



## Training for New Employees

The Company formulated and implemented a centralized training program for new employees, covering topics such as company introduction, corporate culture, policies and regulations, professional skills, career ethics and team development. This ensured that new employees could be faster integration into the team. In addition, continuous support and training were provided to new employees throughout their first year.

### Case Shanshan Anode conducted onboarding training for 2024 graduates

In July 2024, Shanshan Anode launched the "Young Talents Showcase Excellence" Lithium Industry Talent Development Program for over 170 new employees who just graduated in 2024. The program included an onboarding ceremony, career advice sessions, corporate culture sharing session, safety training, and activities such as the exhibition hall tour, team-building activity, and one-on-one mentor-apprentice pairing ceremony. These initiatives accelerated new employees' understanding of Shanshan Anode's corporate culture while strengthening their sense of belonging and loyalty.



Group Photo of 2024 Graduates at the Onboarding Ceremony | The Corporate Culture Sharing Session | The One-to-one Mentor-apprentice Pairing Ceremony

## Leadership Training

The Company advocates continuous learning for managers and has provided training for all levels for several years in a row to continuously strengthen managers' leadership and management capabilities, empowering all managers to broaden their horizons, break boundaries, and better assume greater responsibilities. In May 2024, the Company held the graduation ceremony for the 8-month "Shanshan 2023 Middle Management Development Camp" at Shanghai Jiao Tong University. The camp systematically cultivated management and reserved talents aligned with the Company's development needs through "self-empowerment", "team empowerment", "business empowerment" and "visiting and learning" these four aspects.

### Case Conducted leadership training series to facilitate new managers' role transition

In July 2024, Shanjin Optoelectronics (Zhangjiagang) conducted a systematic leadership training with the theme of From Professional Post to Management Position for 8 middle managers. Utilizing innovative formats like team competitions and case studies, the program clarified role-specific responsibilities and tasks, focusing on enhancing their capabilities on subordinate management and empowerment, with emphasis on goal decomposition, team empowerment, and sustainable decision-making ability enhancement.



The Leadership Training Session of Shanjin Optoelectronics (Zhangjiagang)

### Occupational training

The Company prioritizes continuous education and individual growth by offering employees with training programs related to obtaining professional certificates and improving occupational skills. By consolidating internal and external educational resources, the Company designed core talent development plans and organized various specialized training sessions through knowledge sharing, open courses and E-learning online platform, fostering an open, shared and mutually supportive learning atmosphere to elevate their comprehensive capabilities.



The E-learning Online Learning Platform

### Case Shanshan Anode conducted AI skill enhancement training to elevate all employees' occupational skills

From March to December 2024, Shanshan Anode implemented a training program on AI office skills covering four aspects including AI prompt optimization, data analysis, localized deployment, and text-to-image applications. With 200 participants achieving a 100% passing rate, the training program accelerated digital transformation through building a digital talent team, injecting core momentum into intelligent office system upgrades.



AI Office Skills Training

### Case Shanjin Optoelectronics formulated core talent development plan to build workforce with professional capabilities

In 2024, Shanjin Optoelectronics launched a five-year core talent cultivation plan, offering differentiated courses including macro perspective, strategic/organization/personnel/value/competency management courses for the Company's DLP and HPI employees. Integrated with university EDP programs, BenchMarking, and cross-departmental/regional rotations, the plan has built a workforce supporting the Company's green intelligent manufacturing strategy.

#### Shanjin Optoelectronics Core Talent Training Plan

YEAR	DLP	HPI
YEAR 1	Macro Perspective	Strategic Management
YEAR 2	Strategic Leadership	Internal Control
YEAR 3	Organizational Empowerment	Core Management Strength
YEAR 4	Value Management	Managerial Competency
YEAR 5	Unity of Knowledge and Action	Unity of Knowledge and Action

#### Other common courses:

- Hotspot empowerment: conduct courses in line with annual industry hotspots such as digitalization, big data, and artificial intelligence
- Challenge-based empowerment: conduct courses or case studies addressing low-scoring items from the annual Leadership Survey such as authorization, resource management, interpersonal relationships, etc.
- Foreign language learning: learn a foreign language according to personal needs (including but not limited to Business English/Japanese/Korean) in Years 1-3
- Visit to leading enterprises



## Compensation and Benefits

The Company is committed to ensuring the fairness and scientifically designed employee compensation, and benefits and has formulated policies such as Compensation and Benefits Management, Salary Management Policy, Labor Insurance and Welfare Policies, and Employee Attendance and Leave Policies. The Company has paid overtime wages and social insurance on time and in full in accordance with the law and built a scientific and market-competitive compensation system that aligns with the Company's strategic development needs.

**Employee compensation**

- **Standard salaries:** comprising basic salary and performance-based salary
- **Overtime wages**
- **Allowances:** duty-based allowance, qualification-based allowance, night shift allowance, special allowance, academic allowance, technician allowance, position-specific allowance, communication allowance, transportation allowance, meal allowance, etc.
- **Bonuses:** spot bonus, production bonus, year-end bonus, performance recognition award, Spring Festival subsidy, achievement-based bonus, etc.

### Employee Compensation Structure

In addition, the Company provides employees with multi-level benefits such as a fixed benefit plan and a glorious retirement plan, creating a higher-quality working environment and living conditions. It integrates employee care into the corporate culture, with every detail effectively enhancing employees' sense of belonging and happiness, thereby better retaining talent and improving the Company's core competitiveness.

**Statutory benefits**

- **Statutory "five insurances and one fund":** basic pension insurance, basic medical insurance, unemployment insurance, work-related injury insurance, maternity insurance, and provident fund
- **Statutory holidays:** Spring Festival, New Year's Day, Qingming Festival, Labor Day, Dragon Boat Festival, Mid-Autumn Festival, National Day, a total of 11 statutory holidays per year
- **Statutory paid leave:** paid annual leave, sick leave, marriage leave, bereavement leave, prenatal check-up leaves, maternity leave, paternity leave, breastfeeding leave, etc.

**Company benefits**

- Training programs, team-building activities, holiday and birthday rewards, long-service recognition awards, supplementary annual leave beyond statutory requirements, pre-employment and annual health check-ups, company-sponsored travel opportunities, accident insurance coverage, assistance in handling residency permit and household registration credit, etc.

### Employee Benefits System

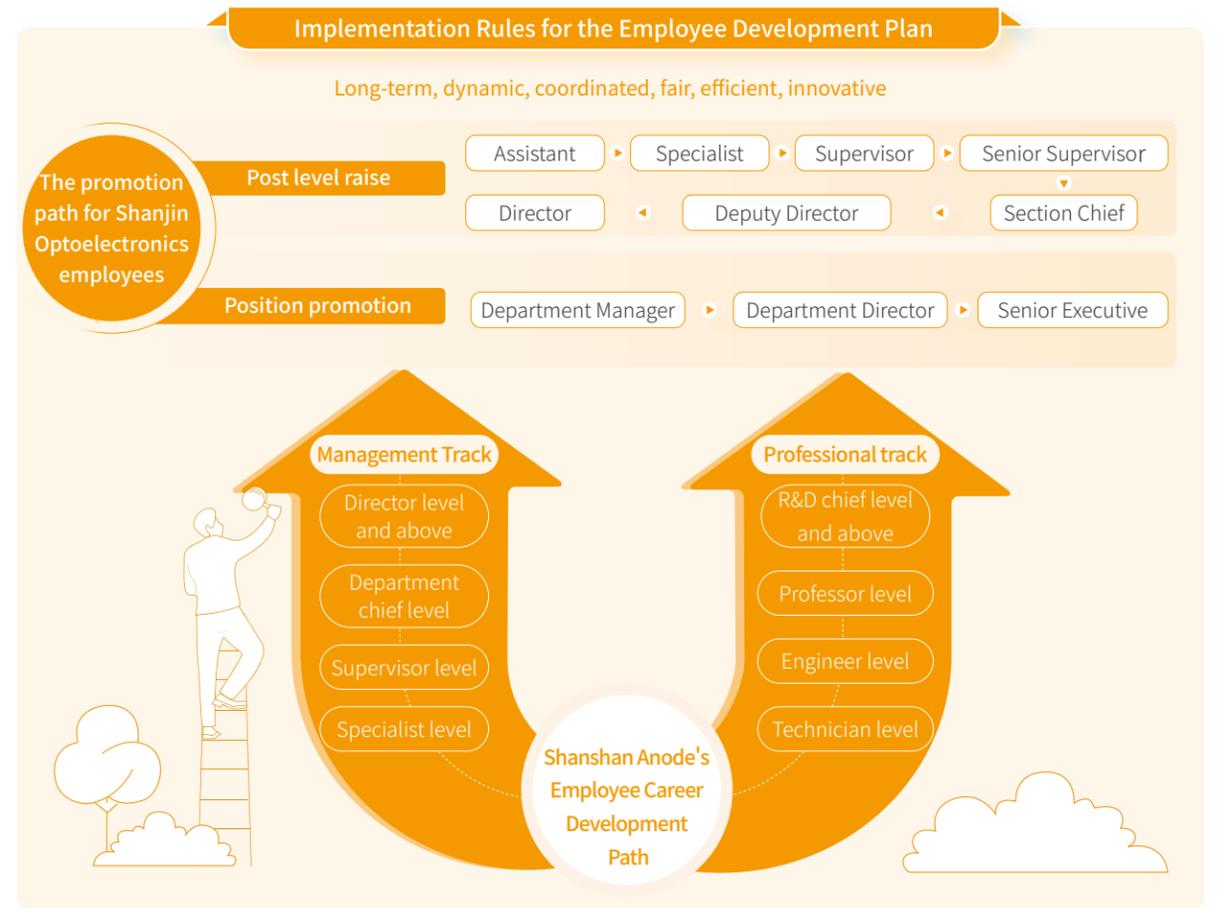


A Poster Promoting the Employee Glorious Retirement Plan



## Promotion Paths

The Company places great emphasis on talent team building. It has established systems such as the Performance Assessment Management Measures, Position Appointment, Removal and Promotion Management System, and Employee Assessment Management System, and has issued the Annual Performance Assessment Implementation Plan. It has also compiled Position Descriptions for various departments, clarifying the responsibilities, qualification requirements, assessment criteria, and promotion evaluation benchmarks for each position. This establishes a comprehensive career development system, helping the Company achieve long-term sustainable commercial and social value creation.



The Company values the outstanding performance of every employee and strives to ensure transparent job post information and a fair recruitment process, attracting talented and collaborative top-tier professionals while fostering a loyal, excellent, and culturally aligned workforce, continuously improving talent reserve management. In addition, the Company encourages internal referrals and healthy internal mobility of outstanding talent. By publishing competitive recruitment information through the Human Resources Department, it enhances employee motivation and boosts the Company's overall competitiveness.

The Company hired **357** employees through internal referrals

**212** employees secured positions through internal competitive recruitment.

In 2024

# Employee Care and Activities

Shanshan respects and recognizes employee value by organizing diverse activities such as the Hiking Club, Running Club and Badminton Club, holiday activities, and birthday parties, enriching employees' spiritual and cultural lives while promoting work-life balance. In addition, the Company has provided financial aid to employees in need and carried out care initiatives like the Summer "Heat Relief" Initiative and Employee Family Visit Day, offering humane management and care to strengthen employee cohesion and belonging.



The Hiking Club



The Badminton Club



A Birthday Party



A Dormitory Activity



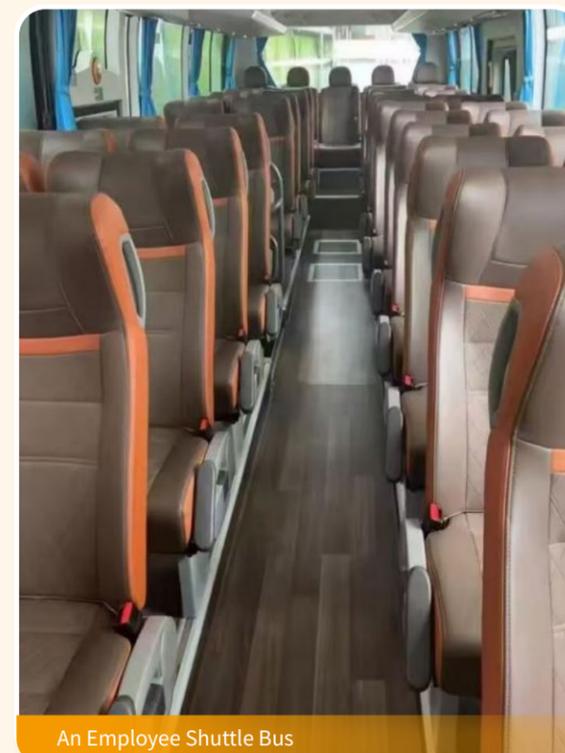
The Running Club



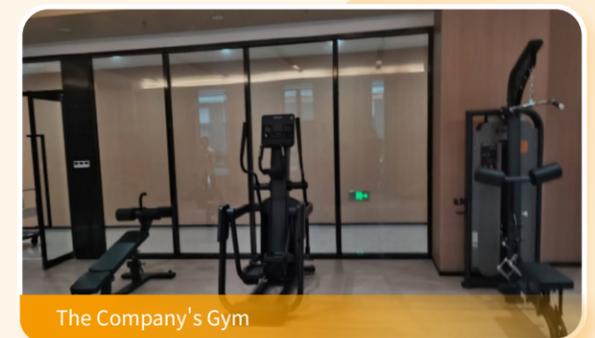
Employee Activity on Winter Solstice



Employee Activities for Christmas



An Employee Shuttle Bus



The Company's Gym



**Case** Conducted Summer "Heat Relief" Initiative to support frontline employees working at high temperatures

From July to August 2024, to safeguard employees' health and production safety, the Company proactively conducted the Summer "Heat Relief" Initiative to support frontline employees, distributing various heat-relief supplies and thoroughly assessing their working conditions and safety and health protection measures.

**Shanshan Anode**

Shanshan Anode and its factories provided employees with watermelons, beverages, drinking water, heatstroke prevention medicine, and other "cooling benefits". All companies canteens also supplemented offerings with mung bean soup, sour plum soup, and other refreshing drinks to help employees beat the heat.



Shanshan Anode Personnel at the "Heat Relief" Initiative Site

**Shanjin Optoelectronics**

Shanjin Optoelectronics' outdoor operations mainly involve five departments including logistics, external packaging, and environmental safety, covering 150 employees. Shanjin Optoelectronics (Nanjing) Trade Union delivered "cooling kits" containing toiletries, Huoxiang Zhengqi Shui (heatstroke relief liquid), cooling arm sleeves and other items to employees, while equipping all outdoor operation departments with emergency anti-heatstroke medical kits.



An Anti-heatstroke Emergency Medical Kit



The "Cooling Kits" Distribution Site

**Case** Organized the Family Visit Day to build bonds between employees and their family members

In July 2024, Shanjin Optoelectronics held its 5th Family Visit Day, showcasing products, market prospects, working conditions and working content to employees' family members, along with immersive magic performances and other activities. This not only gave employees' families deeper understanding of the Company but also strengthened emotional bonds between employees and their families.



Group Photo of Employees' Family Member on the Family Visit Day



# Occupational Health and Safety

Shanshan always prioritizes employees' occupational health and safety, strictly implementing laws and regulations including the Law of the People's Republic of China on Work Safety and ISO 45001 Occupational Health and Safety Management System requirements. The Company adheres to the work safety principle of "safety first, prevention as the core, comprehensive management", upholding the concept of "divide and conquer, categorized implementation, gradual advancement, overall improvement" to establish a sound occupational health and safety management mechanism. The Company has formulated systems including the Quality, Environment, Occupational Health and Safety Management Manual, Management System of Work Safety Responsibility System, and Work Safety Target Management System, and formed the Document of Annual Safety, Environmental Protection and Health Target Management Responsibility to improve the responsibility incentive and constraint mechanism.

**Annual strategic plan for work safety**

Standardize safety inspections, refine inspection content, strengthen on-site management, and enhance education during holiday periods when accidents frequently occur.

**Shanjin Optoelectronics**

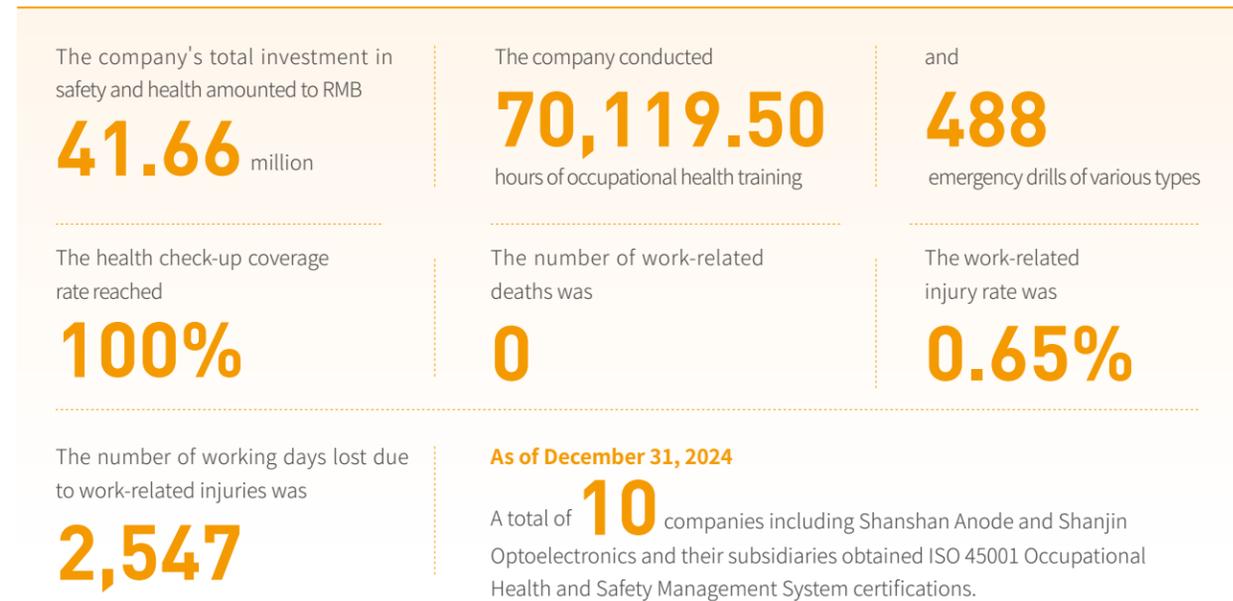
Annual safety management targets	Target value	Status
Severe injury or above accidents	0	Achieved
Fire and explosion accidents	0	Achieved
Outpatient treatment Class B accidents	0	Achieved
Implementation rate and pass rate of safety education and training for various types of personnel	100%	Achieved
The integrity rate of safety equipment and facilities, and the integrity rate of other equipment and facilities (including special equipment)	100%	Achieved
Annual hidden danger hazard rectification rate	Above 95%	Achieved
Implement the work safety responsibility system for all employees (formulate, training and assessment pass rate)	100%	Achieved
Enforcement rate of "Three Violations" investigation and punishment	100%	Achieved
Regularly identify safety risks and implement tiered control implementation rate	100%	Achieved
Completion rate of emergency rescue training and drills	100%	Achieved

**Shanshan Anode**

Annual management targets related to occupational health and safety	Target value	Status
Major and serious EHS accidents	0	No major or serious EHS incidents
Occupational disease incidence rate among employees	0	Achieved
Completion rate of major hidden hazard rectification	100%	Achieved
Completion rate of emergency drill plan	100%	Achieved



ISO 45001 Occupational Health and Safety Management System Certifications of Shanshan Anode (left) and Shanjin Optoelectronics (right) (selected)



### Work Safety Risk Control

To implement the work safety risk control and hidden hazard management, the Company has formulated systems such as the Hazard Factor Identification and Risk Assessment Standard Manual, established a safety risk classification and control team, and regularly carried out safety inspections, hidden hazard investigations, hazard source identification, and safety risk assessments in accordance with the Work Plan for Safety and Environmental Protection Hidden Hazard Investigation, resulting in the Hidden Hazard Investigation and Risk Identification, Classification and Control Report. With source governance and process control as the core, the Company has formulated corresponding control measures to effectively control the hazard sources. Additionally, based on the factory safety risk assessment results, the Company has developed a four-color risk distribution map, which clearly identifies risk levels in different areas through the distribution map to ensure effective monitoring and management of key areas and prevent accidents.

### Safety inspection forms



Safety Inspection Forms

### Safety Training and Emergency Drills

The Company continues to promote the corporate safety culture development, and has formulated the Emergency Plan for Sudden Occupational Health and Safety Incidents, Safety and Environmental Protection Emergency Plan and Drill Management System, and Safety Education Management System. Through systematic measures, it strengthens the safety awareness and sense of responsibility of all employees, strengthens employees' emergency response capabilities, and promotes the comprehensive implementation of the safety management system.



The Work Safety Promotional Slogan

### Case Conducted work safety month activities to strengthen safety awareness and capabilities

In June 2024, in order to implement the requirements of China's 23rd "Work Safety Month", the Shanshan Anode Jiuyuan Factory systematically carried out a series of safety activities around the theme of "Everyone Prioritizes Safety, All Are Capable of Emergency Response: Keeping Life Channels Unobstructed". The initiative was advanced through an integrated approach combining organizational safeguards, awareness campaigns, and practical emergency drills. Shanshan Anode Jiuyuan Factory promoted safety knowledge through multiple channels including DingTalk groups and regular meetings, established special columns to enhance full participation, and specifically conducted 2 high-risk operation training sessions and 4 emergency drills covering scenarios such as heatstroke response, dormitory evacuation, spray furnace accident handling, and warehouse fire emergency response, with a focus on testing the effectiveness of emergency response plans and employees' practical skills. By combining theory with practice, the activities consolidated the foundation of safety management, promoted responsibility implementation and hidden hazard rectification, effectively improved risk prevention and control levels, and provided support for the continuous improvement of the occupational health and safety system.



A Warehouse Fire Emergency Response Drill



A Heatstroke Response Drill

**Case** Organized firefighting skills competition to strengthen fire safety defenses

During the national "Fire Safety Awareness Month" in November 2024, Shanjin Optoelectronics (Nanjing) actively responded to the call of "Fire Safety for All, Life First" by organizing a fire hydrant practical operation competition for on-site volunteer firefighting teams, focusing on operational assessments to improve their response speed during emergencies. The competition involved 10 volunteer firefighting teams with 113 members, achieving a compliance rate of 95.6%.



The Fire Hydrant Practical Operation Competition

## Occupational Health Management

The company prioritizes occupational health and safety risk management and strictly observes the Law of the People's Republic of China on Prevention and Control of Occupational Diseases. It has established systems such as the Occupational Health Management Procedure and conducted pre-employment, on-the-job, post-transfer, and post-employment occupational health check-ups for employees exposed to toxic and hazardous factors. In addition, it has promptly implemented intervention measures for occupational health impairments, occupational contraindications, or suspected occupational disease cases to protect employees' health. In addition, the Company has actively conducted occupational health and safety training to enhance safety awareness and promote health concepts. It has provided personal protective equipment, medical kits, and installs AED devices in high-traffic areas. The Company has also organized annual health check-ups for employees who have worked in the Company for at least one year and new employees. The Company has improved working conditions, standardized operational procedures, and fostered a healthy and positive work environment to safeguard employees' occupational health and safety.



A First-aid Kit and AED Equipment



**Case** Conducted occupational disease-specific health check-ups to ensure employees' safety

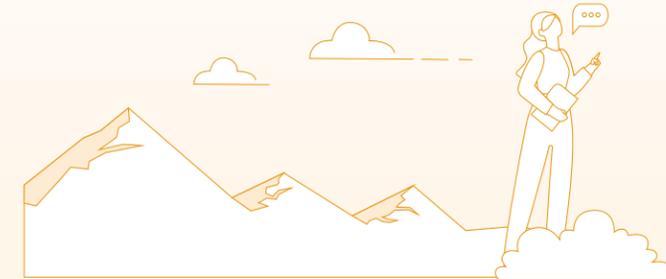
In October 2024, Shanshan Anode Sichuan Factory entrusted a third-party professional medical institution to conduct occupational health check-ups for 1,296 employees (including prospective and current workers) exposed to hazardous substances such as welding fumes, welding arc radiation, manganese and its inorganic compounds (assuming MnO<sub>2</sub>), carbon monoxide, carbon dioxide, miscellaneous dust, and graphite dust. The health check-up covered pre-employment, during-employment, and post-employment stages, achieving a 100% participation rate. Based on the Occupational Health Check-up Summary Report, the Company transferred 2 employees with occupational contraindications to other positions to ensure their physical well-being.

**Case** Offered mindfulness breathing and aromatherapy courses to relieve employees' stress

In December 2024, Shanshan Anode Shanghai Factory invited a professional instructor to conduct mindfulness breathing and aromatherapy courses for employees. The sessions guided employees to harmonize body and nature through mindful breathing combined with the natural energy of aromatherapy, helping them relax and alleviate stress during the process.



A Promotional Poster of Mindfulness Breathing and Aromatherapy Course



**Case** Carried out health-themed activities to enhance disease prevention awareness

In 2024, Shanjin Optoelectronics (Nanjing) launched the "Health Around Us, Safety Every Day" Health Campaign, inviting doctors to educate employees on managing company health records, understanding occupational hazard notification cards, proper selection of personal protective equipment, and first aid knowledge, thereby enhancing individual and collective disease prevention awareness.



The Health Campaign

# 06 Uphold the Mission and Shoulder Responsibilities

## Ideas

As an enterprise with strong social responsibility, Shanshan remains committed to its social obligations and actively contributes to society through various methods. Guided by Party-building principles, the Company has actively participated in social welfare programs, extended corporate care, and vigorously supported rural revitalization, thereby contributing to harmonious social development.

## Our actions

- Social welfare
- Rural revitalization
- Party-building leadership

# Social Welfare

Shanshan actively promotes philanthropic values, fully implements social responsibility management, and consistently spreads warmth to help build a harmonious society. The Company encourages employees to pay attention to social issues in daily life and regularly organizes employees to participate in various public welfare training and activities to enhance their sense of social responsibility and public welfare awareness. In addition, the Company continuously focuses on and participates in social welfare undertakings, and conveys warmth and respect for the society through concrete actions.



**120**

employees of Shanjin Optoelectronics actively participated in social volunteer services contributing a total of

**120** service hours

## Case Shanjin Optoelectronics established an innovation scholarship to support the development of scientific and technological education

Shanjin Optoelectronics (Nanjing) donated to establish the "Shanjin Innovation Scholarship" at Nanjing University, specifically awarded to postgraduate students from the School of Physics, School of Chemistry and Chemical Engineering, and College of Engineering and Applied Sciences, with priority given to those who have won innovation competitions. This initiative supports outstanding students in focusing on scientific research and achieving breakthroughs, shouldering the responsibility of advancing technology progress and serving social development. In 2024, the Company granted scholarships totaling RMB 66,000 to outstanding students at Nanjing University.



The Innovation Scholarship Is Awarded

## Case Shanjin Optoelectronics organized a public blood donation activity to safeguard lives

In August 2024, Shanjin Optoelectronics (Nanjing) organized a public blood donation activity, which received active responses from over 30 employees, contributing warmth and hope to society while spreading positive energy. In recent years, Shanjin Optoelectronics has repeatedly conducted blood donation activities, actively engaging in social welfare initiatives and fulfilling corporate social responsibilities through concrete actions.



A public blood donation activity



# Rural Revitalization

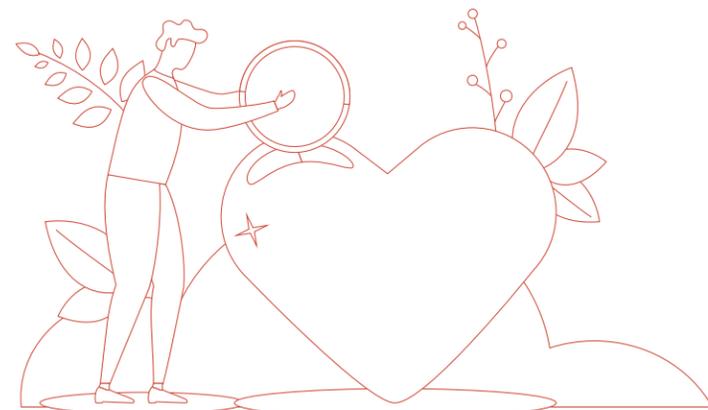
Shanshan has actively responded to the national rural revitalization strategy, thoroughly implemented the central government's requirements for consolidating and expanding achievements in poverty alleviation and comprehensively advancing rural revitalization, and regarded rural revitalization as an important component of fulfilling corporate social responsibilities. Through systematic and targeted assistance measures, the Company is committed to promoting comprehensive rural economic, social and ecological development, contributing to the realization of common prosperity and sustainable development. In 2024, the Company's total investment in rural revitalization amounted to RMB 104,000.

## Case Initiated paired regional donation program to help underprivileged students complete their studies

In July 2024, Shanshan Anode Sichuan Factory initiated a charity donation initiative at its paired village Gonghe Village, donating RMB12,147 charity funds raised in the previous stage to He Jinming, a student at Gonghe Village, Huangfeng Town, to help the student complete studies and contribute to education undertakings.



Shanshan Anode Sichuan Factory Initiates a Charity Donation Initiative at Gonghe Village



## Case The Company visited paired underprivileged farmers every quarter, demonstrating its social responsibility

In 2024, the 18 Party members of Shanshan Anode Ningbo Factory Party Branch took turns to visit Shenxi Village in Haishu District every quarter to visit and comfort the paired underprivileged farmers, delivering essential living supplies to these families. Beyond addressing material needs, these visits provided meaningful companionship and compassionate care, exemplifying the Company's social responsibility.



Shanshan Anode Ningbo Factory's Staff Visit Paired Underprivileged Farmers

# Party-Building Leadership

Shanshan adheres to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, fully implements the spirit of the 20th CPC National Congress, continuously strengthens the construction of grassroots Party organizations, consolidates the foundation of Party-building work, continuously deepens the ideological and political education of Party members, strengthens organizational integrity construction, gives full play to the leadership core of the Party branch and the exemplary role of Party members, and leads the Company's development with Party building.



Party-building Themed Education Study Session

## Key Performance Indicators

Issue	Indicators	Unit	2024	2023	2022
Economic benefits	Operating revenue	RMB 10,000	1,867,972.90	1,907,022.52	2,170,161.73
	Total assets	RMB 10,000	4,620,798.23	4,847,496.60	4,492,549.12
	Tax paid during the reporting period	RMB 10,000	44,933.31	104,614.29	87,280.19
Corporate Governance	Total number of board members	Persons	11	11	11
	Number of female members	Persons	2	2	1
	Number of independent directors	Persons	4	4	4
Business ethics	Total number of confirmed incidents of corruption	Times	0	0	0
	Number of anti-commercial bribery and anti-corruption training sessions conducted	Times	72	3	3
	Average time spent on anti-bribery and anti-corruption training	Hours/person	1.83	1.50	10.00
	Percentage of employees who signed integrity commitment letters	%	100	100	100
	Proportion of suppliers who have signed an anti-bribery commitment	%	100	100	90
	Total number of lawsuits/administrative penalties for violations of fair competition	Cases	0	0	0
Employee recruitment	Total number of employees	Persons	7,184	8,095	7,543
	Number of employees with disabilities	Persons	43	3	/
	Number of ethnic minority employees	Persons	335	276	/
	Number of foreign employees	Persons	32	28	/
Women's career development	Number of female employees	Persons	1,427	1,476	1,421
	Proportion in middle management	%	28.15	27.70	/
	Proportion in senior management	%	23.60	20.00	/

Issue	Indicators	Unit	2024	2023	2022
Employees' rights and interests	Confirmed incidents of discrimination	Cases	0	0	0
	Confirmed incidents of forced labor	Cases	0	0	0
	Confirmed incidents of child labor	Cases	0	0	0
Occupational Health and Safety	Total duration of occupational health and production safety training	Hours	70,199.50	37,793.50	41,371.50
	Various emergency drills	Times	488	260	71
	Total investment in production safety	RMB 10,000	4,166.35	5,186.88	4,456.48
	Employee physical examination coverage	%	100	100	100
	Work-related fatalities	Persons	0	0	0
	Occupational disease incidence	%	0	0	0
Staff training	Total training time	Hours	54,839.40	6,129.50	/
	Annual training sessions	Times	2,779	703	64
R&D innovation	R&D expenditure	RMB 10,000	103,699.62	86,829.73	95,257.23
	Total R&D expenditure in operating income	%	5.55	4.55	4.39
	Total number of R&D personnel	Persons	428	402	137
	Proportion of R&D personnel	%	5.96	4.97	1.82
Data security and customer privacy	Number of confirmed incidents of data security	Cases	0	0	0
	Number of training sessions of data security and customer privacy protection	Times	6	6	6
	Number of relevant emergency drills	Times	5	5	5
	Number of confirmed incidents of customer privacy breach	Cases	0	0	0
Social welfare	Social contribution value per share	RMB	0.87	1.65	2.38
	Amount of social welfare investment	RMB 10,000	100.00	137.80	126.00
Environmental management	Total investment in environmental management	RMB 10,000	10,190.06	4,071.48	4,081.81
	Proportion of total investment in environmental management in operating revenue	%	0.55	0.21	0.19

Note: Partial data for 2022 is unavailable and non-retrievable.

Issue	Indicators	Unit	2024	2023	2022
Energy use	Comprehensive energy consumption	Tons of standard coal	496,457.76	307,931.52	162,383.81
	Total energy consumption per unit of operating revenue	Tons of standard coal/million RMB	26.58	16.15	7.48
	Of which: gasoline	Litre	65,793.31	60,218.96	40,802.70
	Of which: diesel	Litre	627,347.40	696,111.86	351,467.01
	Of which: natural gas	Cubic meters	15,144,235.08	10,820,675.82	9,117,540.84
	Of which: liquefied petroleum gas	Kg	159.50	81.00	12,109.50
	Of which: electricity	MWh	3,802,836.30	2,328,698.37	1,145,666.75
	Of which: steam	Tons of standard coal	29,712.81	26,161.92	25,647.56
	Clean energy consumption	MWh	1,836,438.95	1,311,161.02	119,947.24
	Of which: wind energy	MWh	304,214.01	201,027.74	51,510.00
Of which: solar energy	MWh	167,216.21	78,948.79	0.00	
Waste gas treatment	Total waste gas emissions	Tons	375.02	309.72	89.52
Wastewater management	Total wastewater discharge	Tons (unit: 10,000)	334.95	171.78	155.59
	Wastewater discharge per unit of operating revenue	Tons/RMB 1 million of operating revenue	179.31	90.08	71.69
Water resource management	Total water consumption	Tons	4,928,736.30	4,001,617.45	2,501,502.20
	Intensity of use of water resource	Tons/RMB10,000 of operating revenue	2.64	2.10	1.15
Waste disposal	Total amount of waste generation	Tons	100,415.70	58,480.89	67,794.74
	Of which: total amount of hazardous waste	Tons	11,091.98	8,179.78	7,662.26
	Of which: total amount of general solid waste	Tons	89,323.72	50,301.11	60,132.48
	Total amount of waste recycled/reused	Tons	84,340.39	16,369.16	33,697.18
	Of which: total amount of hazardous waste	Tons	5,356.17	2,586.93	1,706.35
	Of which: total amount of general solid waste	Tons	78,984.22	13,782.23	31,990.83
	Waste recycling rate	%	83.99	27.99	49.70

# Benchmarking

## Global Reporting Initiative (GRI) Standards

<b>Instructions</b>	Shanshan reported the information cited in this GRI Content Index in accordance with the GRI Standards from January 1, 2024 to December 31, 2024.
<b>GRI 1 used</b>	GRI 1: Basis 2021

GRI indicators	Related explanation	Related chapters and sections
GRI 2-1	Details of the organization	This Report
GRI 2-2	Entities included in the organization's sustainability report	This Report
GRI 2-3	Reporting period, reporting frequency and contact person	This Report
GRI 2-5	External assurance	Independent Assurance
GRI 2-6	Activities, value chain and other business relationships	About Shanshan and Supply Chain ESG Management
GRI 2-7	Employees	Employment, rights and interests of employees
GRI 2-9	Governance structure and composition	Strengthen corporate governance
GRI 2-10	Nomination and selection of the highest governance body	Strengthen corporate governance
GRI 2-11	Chairman of the highest governance body	Strengthen Corporate Governance, and See Annual Report
GRI 2-12	Supervisory role of the highest governance body in managing impacts	Strengthen Corporate Governance, and See Annual Report
GRI 2-13	Delegation of responsibility for managing impacts	Strengthen Corporate Governance, and Our Path to Sustainable Development
GRI 2-14	Role of the highest governance body in the sustainability report	Our sustainable development approach
GRI 2-15	Conflicts of interest	Strengthen Corporate Governance, and Our Path to Sustainable Development
GRI 2-16	Communication of key concerns	Our sustainable development approach
GRI 2-17	Highest governance body's shared knowledge	Our sustainable development approach
GRI 2-19	Remuneration policy	Strengthen Corporate Governance, and See Annual Report
GRI 2-20	Procedures for determining remuneration	Strengthen Corporate Governance, and See Annual Report
GRI 2-21	Annual total compensation ratio	See Annual Report
GRI 2-22	Statement on Sustainable Development Strategy	Our Path to Sustainable Development, and Response to Climate Change
GRI 2-23	Policy commitment	Environmental Compliance Management, Employee Employment and Rights and Interests, Supply Chain ESG Management
GRI 2-24	Integration policy commitment	Environmental Compliance Management, Employee Employment and Rights and Interests, Supply Chain ESG Management

GRI indicators	Related explanation	Related chapters and sections
GRI 2-25	Procedures for remediating adverse effects	Strengthen Corporate Governance, Internal Control and Risk Management
GRI 2-26	Mechanisms for seeking advice and raising concerns	Strengthen Corporate Governance, Internal Control and Risk Management
GRI 2-27	Comply with laws and regulations	Strengthen Corporate Governance, Internal Control and Risk Management
GRI 2-28	Membership of the Association	Promote industry development
GRI 2-29	Methods for stakeholder engagement	Our sustainable development approach
GRI 2-30	Collective Bargaining Agreement	Employment, rights and interests of employees
<b>Substantive issues</b>		
GRI 3-1	Process for identifying substantive issues	Our sustainable development approach
GRI 3-2	List of substantive issues	Our sustainable development approach
GRI 3-3	Management of substantive issues	Our sustainable development approach
<b>Economic benefits</b>		
G201-1	Economic value directly generated and distributed	See Annual Report
G201-2	Financial impacts and other risks and opportunities brought about by climate change	Climate change response
G201-3	Defined benefit plan obligations and other retirement plans	Employment, rights and interests of employees
G201-4	Financial subsidies from the government	See Annual Report
<b>Anti-corruption</b>		
G205-2	Communication and training on anti-corruption policies and procedures	Compliance with Business Ethics
<b>Unfair competition</b>		
G206-1	Legal proceedings against unfair competition, antitrust and anti-monopoly practices	Adhere to Business Ethics, and there have been no such negative incidents this year
<b>Tax</b>		
G207-1	Tax policy	See Annual Report
G207-2	Tax governance, control and risk management	See Annual Report
G207-3	Stakeholder's engagement and management of tax-related issues	See Annual Report
G207-4	Country-by-country reporting	See Annual Report
<b>Energy</b>		
G302-1	Energy consumption within the organization	Climate change response
G302-4	Reduce energy consumption	Climate change response
G302-5	Reduce the energy demand for products and services	Respond to Climate Change and Advocate Green Operations

GRI indicators	Related explanation	Related chapters and sections
<b>Water resources</b>		
G303-1	Interactions with water as a shared resource	Efficient resource utilization
G303-2	Manage impacts associated with water discharge	Efficient resource utilization
G303-5	Water consumption	Efficient resource utilization
<b>Emissions</b>		
G305-1	Direct (Scope 1) greenhouse gas emissions	Climate change response
G305-2	Energy indirect (Scope 2) greenhouse gas emissions	Climate change response
G305-3	Other indirect (Scope 3) greenhouse gas emissions	Climate change response
G305-4	Greenhouse gas emission intensity	Climate change response
G305-7	Nitrogen oxides (NOX), sulfur oxides (SOX) and other significant gas emissions	Efficient resource utilization
<b>Waste</b>		
G306-1	Waste generation and significant waste-related impacts	Efficient resource utilization
G306-2	Manage significant waste-related impacts	Efficient resource utilization
G306-3	Waste generation	Efficient resource utilization
G306-4	Wastes transferred for disposal	Efficient resource utilization
G306-5	Wastes designated for disposal	Efficient resource utilization
<b>Supplier environmental assessment</b>		
G308-1	New suppliers screened using environmental criteria	Supply chain ESG management
G308-2	Negative impacts of supply chain on the environment and the actions taken	Supply chain ESG management
<b>Employment</b>		
G401-2	Benefits provided for full-time employees (not including temporary or part-time employees)	Employee Employment and Rights and Interests, Employee Development and Training, and Employee Care and Activities
<b>Occupational health and safety</b>		
G403-1	Occupational health and safety management system	Occupational health and safety
G403-2	Hazard identification, risk assessment and incident investigation	Occupational health and safety
G403-3	Occupational health services	Occupational health and safety
G403-4	Occupational health and safety affairs: worker participation, consultation and communication	Occupational health and safety
G403-5	Occupational health and safety training for workers	Occupational health and safety
G403-6	Promote workers' health	Occupational health and safety

GRI indicators	Related explanation	Related chapters and sections
G403-7	Prevent and mitigate occupational health and safety impacts directly related to business relationships	Occupational health and safety
G403-9	Work Injury	Occupational health and safety
G403-10	Work-related health problems	Occupational health and safety
<b>Training and education</b>		
G404-1	Average hours of training per employee per year	Employee development and training
G404-2	Employee skills improvement program and transition assistance program	Employee development and training
<b>Diversity and equal opportunity</b>		
G405-1	Diversity of governance bodies and employees	Strengthening Corporate Governance, and Employee Employment and Rights and Interests
<b>Anti-discrimination</b>		
G406-1	Incidents of discrimination and corrective actions taken	Employee Employment and Rights and Interests, and there have been no such negative incidents this year
<b>Child labor</b>		
G408-1	Operations and suppliers at significant risk of child labor incidents	Employee Employment and Rights and Interests, and there have been no such negative incidents this year
<b>Forced labor</b>		
G409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employee Employment and Rights and Interests, and there have been no such negative incidents this year
<b>Local community</b>		
G413-1	Operations with local community engagement, impact assessments and development plans	Social Welfare, and Rural Revitalization
<b>Supplier social assessment</b>		
G414-1	New suppliers screened using social criteria	Supply chain ESG management
G414-2	Negative impacts of supply chains on society and the actions taken	Supply chain ESG management
<b>Customer health and safety</b>		
G416-1	Assessment of the health and safety impacts of product and service categories	Strictly Control Quality Management, and Chemical Safety Management
<b>Marketing and label</b>		
G417-1	Requirements for product and service information and labeling	Strictly Control Quality Management, and Adhere to Business Ethics
<b>Customer privacy</b>		
G418-1	Substantiated complaints regarding breaches of customer privacy and loss of customer data	Protect Information Security, and there have been no such negative incidents this year

### Benchmarking Table of Guidelines No.14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies - Sustainability Report (Trial) (April 2024)

Indicators	Corresponding chapters and sections of this report
Climate change response	Climate change response
Pollutant emissions	Environmental compliance management
Waste disposal	Efficient resource utilization
Ecosystem and biodiversity conservation	Green operation advocacy
Environmental compliance management	Environmental compliance management
Energy utilization	Climate change response
Water resource utilization	Efficient resource utilization
Circular economy	Efficient resource utilization
Rural revitalization	Rural revitalization
Social contribution	Social welfare
Innovation driven	Innovation and R&D driven
Ethics of science and technology	Not applicable. The Company's core operations do not engage in fields such as gene editing or AI, and no technology ethics-related matters have been involved in business activities.
Supply Chain Security	Supply chain ESG management
Treat small and medium-sized enterprises equally	Compliance with Business Ethics
Safety and quality of products and services	Strict quality management Response to customer needs
Data security and customer privacy protection	Protecting information security
Employees	Employment, rights and interests of employees Employee development and training Employee care and activities Occupational health and safety
Due diligence	Our sustainable development approach Supply chain ESG management
Stakeholder's communication	Our sustainable development approach
Anti-commercial bribery and anti-corruption	Compliance with Business Ethics Supply chain ESG management
Anti-unfair competition	Compliance with Business Ethics

# Reader Feedback

Dear readers,

Thank you for reading the Ningbo Shanshan Co., Ltd. 2024 Environmental, Social, and Governance (ESG) Report. Your feedback and suggestions are greatly appreciated as the Company strives to provide more valuable information to you and other stakeholders and to continuously improve its ability to fulfill its corporate social responsibility.

Check the box that applies:

1. How would you rate this report in general?

Excellent     Good     Average     Poor     Very Poor

2. How responsive do you think the report is to stakeholder concerns and the level of disclosure?

Excellent     Good     Average     Poor     Very Poor

3. How would you rate Shanshan's performance in fulfilling its financial responsibility?

Excellent     Good     Average     Poor     Very Poor

4. How would you rate Shanshan's performance in fulfilling its environmental responsibility?

Excellent     Good     Average     Poor     Very Poor

5. How would you rate Shanshan's security management performance?

Excellent     Good     Average     Poor     Very Poor

6. How would you rate Shanshan's performance in fulfilling its employee responsibility?

Excellent     Good     Average     Poor     Very Poor

7. How would you rate Shanshan's performance in fulfilling its community responsibility?

Excellent     Good     Average     Poor     Very Poor

8. Are the information, indicators, and data disclosed in the report clear, accurate, and complete?

Excellent     Good     Average     Poor     Very Poor

9. Do you find the content structure and format of the report to be reader-friendly?

Yes     No

Open-ended question:

Do you have any comments or suggestions regarding Shanshan's corporate social responsibility and this report?

