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### **About the Report**

#### **Report Overview**

The Report is the first environmental, social and governance (ESG) report released by Sineng Electric Co., Ltd. (hereinafter referred to as "Sineng Electric", the "Company" or "we"), with the aim to disclose to stakeholders information about the Company's management of various ESG issues as well as related actions and performance.

### Scope of the Report

The report covers Sineng Electric Co., Ltd. as well as its branches and subsidiaries.

### **Reporting Period**

The reporting period lasts from January 1, 2024 to December 31, 2024. To enhance the comparability and continuity of the contents, certain data from previous years are incorporated where appropriate.

### **Reporting Cycle**

The Report is released on an annual basis concurrently with the Company's annual report, with the specific date of release subject to the current year's schedule.

#### **Data Source**

All the data in the Report are sourced from relevant internal statistical statements of Sineng Electric, company files, and stakeholder surveys and interviews, etc.

#### **Report References**

The Report is prepared in accordance with the Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation) and the Self-Regulatory Guide No. 3 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report Preparation, and also taking into account the Company's actual conditions at the current stage.

#### Disclaimer

This Report contains forward-looking statements. All statements regarding potential or future events (including but not limited to assumptions, objectives, estimates, and business plans), other than historical facts, are forward-looking statements. Actual future outcomes or trends may vary due to external variables.

### Message from the Chairman

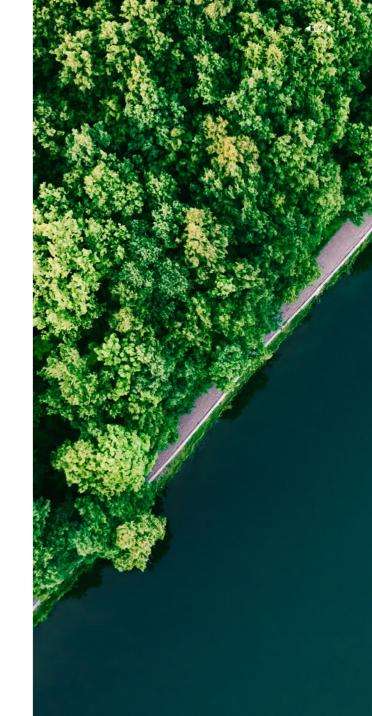
In 2024, we took solid strides forward in our sustainability journey, and achieved gratifying outcomes

In the environmental dimension, we consistently guide various business activities across the Company with the concept about green development. As a company with a strong influence in the energy field, we are keenly aware of our responsibility in driving energy transition and addressing climate change. In 2024, we stepped up R&D input in renewable energies, devoted to developing more efficient and environment-friendly energy solutions. Our core products, including the PV inverters, achieved breakthroughs in not only conversion efficiency, but also energy conservation and carbon reduction. By conducting assessment of the carbon footprints of products, we gained precise insights that empower us to cut carbon emissions throughout product lifecycles. Meanwhile, we pressed ahead with the building of intelligent factories. By introducing advanced manufacturing execution system (MES) and warehouse management system (WMS), we achieved fine management of the production process, reducing resources waste and environmental pollution.

In the social dimension, we uphold the human-oriented approach, and actively fulfil our social responsibility. We value employee training and development, offering them broad career opportunities and an enabling work environment. In 2024, we further refined the talent training system, and launched training sessions at multiple levels and in diverse forms, to help employees enhance their professional skills and overall competencies. Meanwhile, we care about employees' physical and mental well-being, organising a variety of cultural & sports activities and physical examinations, among other welfare projects, to make employees feel the care from the Company. In terms of public welfare undertakings, we actively supported China's rural revitalisation strategy, promoting the development of rural areas through education financing and infrastructure improvement initiatives.

In the dimension of corporate governance, we keep improving the Company's governance structure and management system. In 2024, we further strengthened ESG building, to ensure the ESG concept to be deeply incorporated in the Company's strategic planning and daily operations. Meanwhile, we sped up digital transformation, refining the Company's management process and decision-making mechanism and raising the Company's operating efficiency and management level with the help of big data, AI and other cutting-edge technologies. In addition, we increased communication and cooperation with investors, customers, suppliers and other stakeholders, listened to their opinions and suggestions, and constantly enhanced the Company's market competitiveness and social profile.

Going ahead, we'll stay committed to the ESG concept, and make continuous exploration and innovation, so as to contribute greater to the Company's sustainable development as well as social progress and environmental protection. We'll scale up input in renewable energies, and drive the innovation and application of energy technologies, to empower the acceleration of energy transition across the globe. Meanwhile, we'll keep a close eye on social demands, and actively engage in public welfare initiatives, to promote the building of a harmonious society. Let's work together towards a better future.



### **About Sineng Electric**

### **Company Profile**

Sineng Electric Co., Ltd. (stock code: 300827) is a state-level high-tech enterprise dedicated to the R&D, manufacturing and sales of digital power products-covering areas such as PV inverters, energy storage converters and systems, digital electric energy, and power station development. The Company is committed to providing globally leading "solar-plus-storage" solutions that span all scenarios, practising the philosophy of green, low-carbon and efficient development, and riding the tide of the times by spearheading industrial innovation.

Sineng Electric adheres to the concept of "being market-oriented and driving development through innovation", and advances the building of an industry-academia-research collaboration system on all fronts. To date, the Company has established four R&D centres respectively in Shenzhen, Wuxi, Suzhou and Chengdu, as well as three production bases respectively in Wuxi, Jiangsu; Wuzhong, Ningxia; and Bangalore, India. The Company was successively honoured with titles including one of the first national green factories, CNAS certified laboratory, national manufacturing single-item champion product, national enterprise technology centre, national enterprise with competitive IPRs, national intelligent PV pilot demonstration enterprise, and national green supply chain management enterprise.

Sineng Electric leverages state-of-the-art technologies to build full-scenario PV system solutions. The Company's full-power-range PV inverters are widely

applied in scenarios like large ground power stations, industrial, commercial and residential rooftops, meeting diversified customer demands, and promoting the fast development of the global PV industry. For its remarkable technical expertise and market influence, Sineng Electric has been consecutively listed by BloombergNEF among the world's Tier 1 PV inverter manufacturers.

In terms of energy storage, Sineng Electric delivers full-scenario energy storage system solutions, including a comprehensive range of 1000V/1500V energy storage converters and system integration solutions that cover centralized and string technical routes and target diverse scenarios on the power generation, power grid, power distribution and microgrid sides. Through innovative technology products and solutions, the Company advances towards the forefront of the global energy transition tide.

In terms of digital electric energy, Sineng Electric delivers full-scenario digital electric energy system solutions, including a full range of products such as active power filters, static var generators, and dynamic voltage regulators, that are applied to communication, healthcare, rail transit, petroleum and petrochemical, metallurgy, photovoltaics, and semiconductors, among other industries. Through exceptional technologies enhancing the quality of electric energy, the Company safeguards the stability and security of power grids.

Sineng Electric actively expands into global markets, and continuously deepens and improves its internationalisation strategy, with presence across North America, Europe, Central and East Asia, Asia Pacific, and South America. With a global vision, the Company works to build a future powered by green energy, making the Planet cleaner and more beautiful, and transforming the energy landscape through Sineng Electric.



3

Production bases



R&D centres



Global service centres

Global PV inverter manufacturer listed by BloombergNEF

Tier 1

Stock code

300827

Domestic PCS shipments (S&P Global @2024)

Top 2

#### **Corporate Culture**



#### Transforming the energy landscape through Sineng Electric

In face of the severe challenges posed by global climate change and the shortage of traditional energy, Sineng Electric actively assumes the mission of "transforming the energy landscape through Sineng Electric". It deepens product R&D, remains led by technology, advances cooperation on competitive resources, and practises the ESG concept, with the aim to deliver efficient, reliable and environment-friendly energy solutions, inject its strength into global sustainability, and build a green and low-carbon future.



#### Becoming a world-class power supply enterprise

Sineng Electric always pursues excellence in products, solutions and services, and strides towards the forefront of the global industrial tide. Our vision is to become a world-class power supply enterprise, leading the progress and development of the energy industry, and setting a benchmark of quality and innovation worldwide.



#### Sincerity · Unity · Enterprise

We champion integrity, responsibility, and sincere communication. We encourage team members to exchange ideas and information in an open manner, earn the trust of customers, partners and the society by exhibiting sincerity in all business transactions, and actively fulfil the Company's CSR. We of both individuals and collectives. We are positive, enterprising, and innovative. We remain com-





**SINENG** 

#### **Business Portfolios**

#### **PV** inverters



String inverters

#### Digital electric energy

Centralised inverters



 APF active power filter series

- SVG static var generator series
- DVR dynamic voltage regulator series

• Household hybrid inverters

#### **Energy storage system**



- Centralised energy storage converter
- String energy storage converter

 Household energy storage converter

#### Power station development



 Centralised PV power stations

- Industrial and commercial PV power stations
- Household PV power stations



#### **Awards and Honors**

Important state-level awards and honours earned by the Company:

Green supply chain management enterprise

First batch of national green factories

National intelligent PV pilot demonstration enterprise

National enterprise with competitive IPRs

The state of the s

National enterprise technology centre

And Control

National manufacturing single-item champion product

Marine Count

CNAS certified laboratory

Post-doctor research station

## Sustainable **Development** Management

- ESG Governance
- ESG Action Response
- Communication with Stakeholders
- · Evaluation of Material Issues

This section overviews Sineng Electric's strategic planning and real actions in sustainability management. The Company established a complete ESG management structure, and clearly defined the responsibilities of the decision-making, management and execution levels, to ensure the EGS concept is deeply integrated into every part of its operations. In terms of actions, Sineng Electric actively aligned with the UN SDGs, and took a series of concrete steps, such as funding educations programs and providing clean drinking water and sanitary facilities, to promote the sustainable development of the society and environment. The Company also put in place an effective mechanism for communication with stakeholders. Through questionnaire surveys and interviews, it gained deep insights into the expectations of various stakeholders, ensuring the ESG actions are well targeted and highly effective. In addition, through science-based evaluation of material issues, the Company precisely identified the issues having significant impacts on the economy, society and environment, providing a solid foundation for subsequent formulation of sustainability strategies.

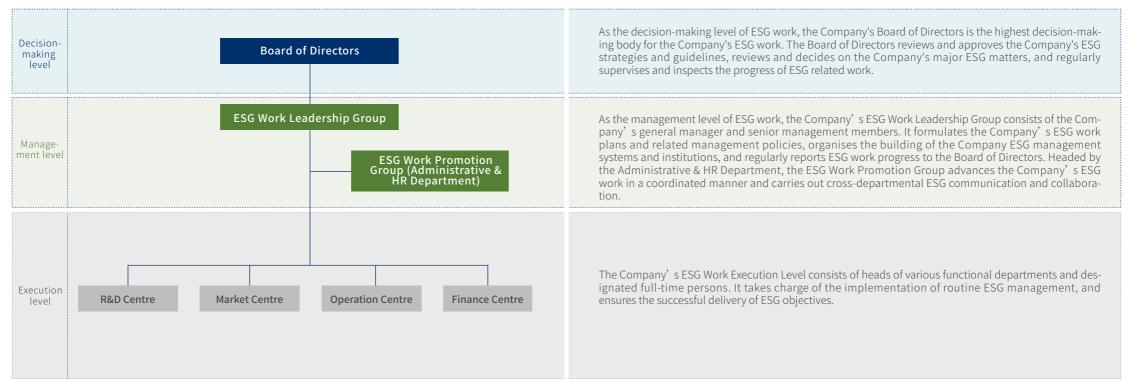


#### **ESG Governance**

To meet its needs for strategic development, Sineng Electric kept refining its EGS management structure, and worked to enhance strategic planning and ESG management capabilities. While completing its EGS work system step by step, the Company planned to establish an ESG management structure comprising three levels, i.e. decision-making level, management level, and execution level, in 2025, and comprehensively reviewed and updated its ESG management system, to better implement its sustainability strategies and policies. On such a basis, the Company further set up the ESG Work Leadership Group, under which the ESG Work Promotion Group was established, to plan for and manage ESG related work. At the execution level, the Company set up the ESG Work Execution Group comprising members from various functional departments, to coordinate the implementation of various ESG work across the Company.

#### ESG management structure

#### ESG responsibilities and division of labour



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### **ESG Action Response**

To align with the UN's 17 SDGs 2030, Sineng Electric Co., Ltd. took a series of ESG related actions, which included:

#### Strengthening international cooperation:

Sineng Electric cooperated with international organizations and enterprises, to jointly advance the realization of sustainability goals and promote partnerships across the globe.

#### Improving corporate governance:

In strict accordance with applicable laws and regulations, Sineng Electric continuously improved its governance structure as a legal person, completed internal control systems, defined the responsibilities and authorities, rules of procedure and work procedures for the shareholders' meeting, Board of Directors, Board of Supervisors and the management, established scientific and effective division of responsibilities and labour and a check-and-balance mechanism, and effectively safeguarded the legitimate rights of all shareholders, especially minority shareholders and creditors.

#### Protecting biodiversity:

During project development and operation, Sineng Electric valued the protection of biodiversity in places where projects are located, avoiding negative impacts on local ecosystem.

#### Protecting the aquatic ecosystem:

During project site selection and operation, Sineng Electric fully considered the impacts on the aquatic ecosystem, taking effective steps to minimize the disturbance and damage to aquatic life.

#### Promoting global low-carbon transition:

Sineng Electric continuously deepened its internationalisation strategy, further improving its global sales and service networks, and operating in Asia Pacific, Central and East Africa, Europe and the US markets. It drove the acceleration of global transition towards green energy, contributing to the response to climate change.

#### Optimising product design and production:

During product design, Sineng Electric fully considered the recycling and scrapping of materials, and prolonged the service life of products. During product manufacturing, it refined production processes, improved equipment capabilities, reduced consumption of water and electricity, and enhanced the utilization rate of materials.

#### Strengthening environment management:

Sineng Electric ensured the sustained and effective operation of the environment management system, promoted clean production, regularly reported to competent environmental protection authorities for filing, passed on-site review, and effectively controlled pollutant emissions and reduced resources waste.

#### Supporting rural revitalisation:

Sineng Electric financed rural revitalization projects, promoted the development of rural areas, improved the living conditions of local residents, and facilitated the sustainable development of communities.



#### Financing education programs:

Sineng Electric actively financed education programs, and promoted the development of education undertakings, contributing to the cultivation of future talents.

#### Promoting gender equality:

Sineng Electric upheld the principle of gender equality in employee recruitment, promotion and training, provided female employees with equal development opportunities, and fostered a fair working environment.

#### Water resources management:

During the production process, Sineng Electric paid attention to the reasonable utilization and protection of water resources, reduced waste discharge by technical means, and raised the utilization efficiency of water resources.

#### Providing clean energy solutions:

Sineng Electric focused on the R&D, manufacturing and sales of digital power products, covering areas like PV inverters, energy storage converters and energy storage systems, digital electric energy, and power station development. It worked to provide globally leading "solar-plus-storage" solutions spanning all scenarios, and drive the green transition across the globe.

#### Providing clean energy solutions:

Since entering the Indian market in 2017, Sineng Electric has continuously improved its localised operation strategy, and built a localised team consisting of more than 200 members, addressing the needs for advancing several projects concurrently, creating jobs for local areas and promoting economic growth.

#### Driving the innovation of energy technology:

As a green power enterprise, Sineng Electric pursued product and technology innovation, and strived to build itself into a green technology enterprise, to make the Planet a better home for the people.

#### Optimizing production processes:

Sineng Electric's Wuxi factory is a demonstration workshop of intelligent manufacturing and a benchmark factory of industrial internet in Jiangsu Province, adopting the information systems like MES and WMS throughout the process to ensure production quality and boost production efficiency.

#### Promoting social equality:

Sineng Electric promoted social equality during business development, reducing social inequalities by providing equal access to job opportunities and career development platforms.

#### **Communication with Stakeholders**

Sineng Electric paid attention to stakeholders' concerns and demands. By having in place effective channels and mechanisms for communication with stakeholders, it disclosed the information stakeholders care about in time, and listened to their feedback and suggestions.

Through comprehensive analysis and surveys, Sineng Electric identified its main stakeholders, including shareholders and investors, regulators, stock exchanges and rating agencies, customers, suppliers, contractors and other partners, communities, social public and media, employees, non-governmental organizations (NGOs), and industrial associations.

lain stakeholders	Expectations and demands	Channels of communication
Shareholders and investors	<ul> <li>Economic performance</li> <li>Risk management</li> <li>Management structure</li> <li>Operation compliance</li> <li>R&amp;D innovation</li> </ul>	<ul> <li>Shareholders' meeting</li> <li>Regular report disclosure</li> <li>Daily communication (Phone calls, emails, and meetings)</li> </ul>
Governments and regulators	<ul><li>Compliance management</li><li>Legal employment</li><li>Business ethics</li></ul>	<ul><li>Information disclosure</li><li>Compliance training</li><li>Questionnaire surveys</li></ul>
Customers	<ul> <li>Customer privacy and Information security</li> <li>Customer service</li> <li>Product quality and security</li> <li>Product performance</li> </ul>	<ul> <li>Global service platform</li> <li>Customer visits</li> <li>Quarterly operation meetings</li> <li>Customer satisfaction surveys</li> </ul>
Suppliers and other partners	Sustainable procurement     Business ethics     Responsible production	<ul> <li>Regular assessment and review</li> <li>Supplier meetings</li> <li>Daily communication (Phone calls, emails, and meetings)</li> </ul>

Main stakeholders	Expectations and demands	Channels of communication
Communities, social public and media	Charity and public welfare Protection of employees' rights and interests Ecological environment protection Resources recycling and waste treatment	<ul> <li>Community programme cooperation</li> <li>Charitable and public welfare activities</li> <li>Daily communication (Phone calls, emails, and meetings)</li> </ul>
Employees	<ul> <li>Employee health and safety</li> <li>Employee benefits &amp; rights protection</li> <li>Employee training and development</li> </ul>	<ul> <li>Employee communication groups</li> <li>Corporate email box for employee feedback</li> <li>Corporate service account for employee feedback</li> <li>Employee satisfaction surveys</li> </ul>
NGOs	<ul> <li>Water resources management</li> <li>Energy management</li> <li>Response to climate change</li> <li>Waste management</li> <li>Legal employment</li> </ul>	<ul> <li>Information disclosure</li> <li>Daily communication (Phone calls, emails, and meetings)</li> </ul>
Industrial associations	<ul> <li>Technological innovation and IPR protection</li> <li>Product management</li> </ul>	<ul> <li>Exhibitions</li> <li>Formulation of international standards</li> <li>Academic exchanges</li> <li>Industrial association meetings</li> </ul>

#### **Evaluation of Material Issues**

To further understand the stakeholders' core expectations and demands, and improve the pertinence and materiality of Sineng Electric's ESG report, the Company conducted work by four stages, including the identification, survey, analysis, and screening of issues, in a systematic manner.



Issue identification

- > Conducted in-depth analysis of the Company's business activities, products and services, as well as the whole value chain, to identify the Company's business scope and the scope of its value chain;
- > Identified the issues of financial materiality or influence materiality, and established a comprehensive list of issues based on the 21 issues specified in the Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation), and taking into account the characteristics and development stage of the industry it belongs to, as well as its own business model and the value chain where it's located.



Issue survey

- > Prepared the questionnaires for the 2024 ESG material issue survey and distributed them to the stakeholders including governments and regulators, shareholders and investors, customers, employees, suppliers and partners, communities, media, and others, and finally recovered 269 effective questionnaires.
- > Communicated with the Company's R&D Centre, Marketing Centre, Operation Centre, Financial Centre, and 11 important functional departments, and conducted comprehensive internal and external surveys.



Issue analysis

- > Analysis of influence materiality: Evaluated the influence of the issues on the economy, society and environment, including positive and negative, actual and potential influence; obtained various stakeholders' assessment and scoring for the issues in terms of influence materiality; and identified the influence materiality of the issues based on the opinions of various stakeholders.
- > Analysis of financial materiality: Analysed the issues from perspectives including the continuity of resources use and the reliance on critical relationship in ongoing operations; evaluated the financial materiality of the issues with consideration of resources prices and predicated trends, etc.



Issue screening

- > Ranked the issues based on the results of assessment in dimensions of influence materiality and financial materiality, and identified the issues material to the Company in both dimensions;
- > Screened the highly material issues based on assessment results for the Company to focus on and prioritise in management; the issues will serve as the basis for the subsequent formulation of sustainability reports and related management strategies.





#### Matrix of Material Issue Evaluation



# **Empowerment** through Technology and Innovation

This section elaborates on the strategic layout and exceptional achievements of Sineng Electric in R&D innovation. The Company further stepped up R&D input, and established a R&D layout consisting of four R&D centres respectively located in Shenzhen, Wuxi, Suzhou, and Chengdu. Through close cooperation with universities and research institutes, such as Jiangnan University, the Company integrated resources from various sides, drove the R&D and application of new energy technologies, and won important honours such as the "national manufacturing single-item champion product" and the "First Prize of Science and Technology in Jiangsu Province". In terms of product innovation, Sineng Electric kept driving breakthroughs, and launched several industry-leading products, including the 400KW string energy storage inverter released in 2024. Meanwhile, the Company established laboratories jointly with famous enterprises like ON Semiconductor, injecting strong impetus to its sustainable development.

- R&D Innovation
- Green Products and Solutions
- IPR Protection

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#### **R&D Innovation**

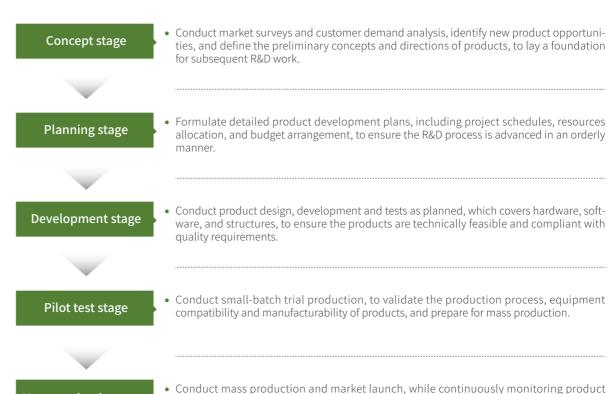
Based on R&D innovation, Sineng Electric has maintained continuous growth in R&D input in recent years. The Company set up four domestic R&D centres respectively in Shenzhen, Wuxi, Suzhou, and Chengdu, forming a R&D network featuring extensive coverage, clear division of labour, and efficient collaboration. It also established the academician work station, post-doctoral work station, and CNAS certified laboratory, among other high-end scientific research platforms. It was certified as a national high-tech enterprise, a national enterprise technology centre, and an enterprise technology centre in Jiangsu Province, with innovative outcomes honoured with the "national manufacturing" single-item champion product", "First Prize of Science and Technology in Jiangsu Province", and "First Prize of Energy Storage Technological Progress in Jiangsu Province", and undertook a number of technological projects including the commercialisation of major technological outcomes and key R&D programs in Jiangsu Province. In addition, Sineng Electric actively cooperated with universities and research institutes, integrating resources from various sides, and jointly driving the R&D and application of new energy technologies. For example, the Company established long-term and stable partnership with Jiangnan University, among others, enhancing its R&D and innovation capabilities through project cooperation and talent training.

Sineng Electric continuously drove technological innovations in such fields as PV inverters, energy storage systems, and digital electric energy, and launched a number of industry-leading products. In September 2024, the Company unveiled the 400KW string energy storage inverter at 2024RE+, pioneering 6.25MW string inverter-booster integrated systems. Compatible with 600Ah+ large cells, it features cutting-edge intelligent liquid cooling technology and achieves 98.5%+ CEC-certified efficiency. In addition, the Company established a laboratory jointly with ON Semiconductor, and both sides carried out high-level and close collaboration on the application of semiconductors, which further enhanced the Company's R&D and innovation capabilities.

#### **R&D Process Management**

Mass production stage

Based on the integrated product development (IPD) process, Sineng Electric conducted effective management of products throughout the process from concept to market launch. It actively introduced new technologies, materials and processes in the R&D process, advancing the constant improvement of product performance and ensuring the products can meet market demands rapidly and efficiently.



quality and market feedback, to ensure the successful launch of products.

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#### Product Quality, Safety and Reliability Management

Sineng Electric Co., Ltd. established comprehensive and rigorous management standards for product quality, safety and reliability management, to ensure the steady operation of products in various environments, and provide global users with reliable and safe green energy solutions. Below is a summary of the system.

#### Whole-lifecycle quality control



Sineng Electric established a complete product quality management system according to international standards, which covers the whole lifecycle of products from design and R&D to after-sales services. At the design stage, it strictly abided by relevant design standards and specifications, and adopted advanced design tools and methods, to ensure reasonable and reliable product design. During the product process, it established standardised operation processes, and used precision equipment and testing instruments for quality control in raw materials procurement, parts & components processing, and product assembly, to ensure the consistency and stability of products. Before shipping, products must undergo several testing steps, including performance testing, electrical safety testing, and environmental adaptation testing, to ensure compliance with high-quality standards.

#### Reliability testing and validation



The Company set up an independent reliability test department and special laboratories to conduct comprehensive reliability tests of products in simulated application scenarios. The tests included the complete machine reliability test, single board (software/hardware) reliability test, and critical/special component reliability test, covering product performance in different working states and environments. Through these tests, the Company can find the defects and weaknesses in product design, material selection, and processes in time, and make targeted improvement, to boost product reliability and service life.

#### Product safety and compliance building



Sineng Electric attached great importance to product safety, and strictly abided by relevant international and domestic safety standards and regulations, such as UL, CE, and TUV certification requirements. In product design and production process, it incorporated comprehensive safety protection measures, such as overload protection, short-circuit protection, lightning protection and insulation protection, to ensure the safe operation of products in abnormal conditions and effectively prevent the occurrence of electrical accidents. Meanwhile, the Company actively pursued safety certifications, and invited authoritative third-party testing agencies for safety testing and assessment, to ensure the compliance of products with market access requirements and provide users with safe and reliable energy conversion equipment.

#### Continuous innovation and improvement



Sineng Electric upheld the concept of continuous improvement and innovation, and constantly optimized the product quality, safety and reliability management system. The Company encouraged employees to provide opinions and suggestions on improvement, and actively introduced advanced quality management methods and technologies, such as six sigma and lean production. Meanwhile, it stepped up R&D input, and vigorously carried out technological innovation activities to develop more efficient, reliable and secure products and technologies, so as to meet customer demands for higher product quality and performance, and drive the Company's sustainability and leadership in the field of green energy.

#### Case: Sineng Electric Obtains CNAS Laboratory Accreditation Certificate

The Wuxi Test Centre of Sineng Electric Co., Ltd. was awarded the "Laboratory Accreditation Certificate" by the China National Accreditation Service for Conformity Assessment (CNAS), marking Sineng Electric reaches the industry-leading level in laboratory management systems, technical competencies and comprehensive capabilities.

CNAS was established with authorisation from the National Certification and Accreditation Administration. As an agency recognised by the state, CNAS aims to show the society that the certified laboratories meet the needs of users in terms of systems and technical competencies, with the test reports issued enjoying undisputed authority and global credibility.





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#### **Green Products and Solutions**

#### Green product design

In the product development process, Sineng Electric integrates multiple green design concepts, such as efficient heat dissipation, lightweight design, eco-friendly recyclability, high reliability and long service life, easy installation and maintenance, and automated production, throughout the whole product lifecycle. From raw material selection, manufacturing, application, maintenance, recycling and disposal, the Company designs all links meticulously, and commits to delivering high-performance environmentally friendly photovoltaic inverters to global users, contributing to global energy transition and setting a new trend of green energy development.

### Efficient heat dissipation, energy conservation and consumption reduction

Heat dissipation through natural convection, forced air cooling, liquid cooling technology and other efficient heat dissipation designs are adopted to minimize energy loss and reduce reliance on additional cooling systems, which increases the inverter efficiency to over 98%-99%, extends the service life, and significantly reduces energy consumption and overall carbon emissions. The designs achieve dual goals of energy conservation and high efficiency, lowering operational costs

for users, while contributing to environmental protection.

### Lightweight design and low-carbon footprints

The inverter's box structure is built with high-strength lightweight aluminium alloy, ensuring a sufficient structural strength to withstand complex working conditions and a substantially reduced weight. This lightweight design decreases carbon footprints of production materials from the source as well as energy consumption and environmental pollution during raw material extraction and processing. During transportation and installation, the reduced equipment weight ensures a higher transportation efficiency, lower energy consumption in transportation and an easier and low-energy installation process, reflecting green design concepts throughout the whole lifecycle, and making products more environmentally friendly at all stages from production to application.



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### Eco-friendly recyclability and green manufacturing

In strict accordance with ROHS, REACH and other environmental standards, the overall structural design extensively adopts eco-friendly metals, eco-friendly plastics and other green materials, with no use of any hazardous substances, so as to minimize potential harms to ecosystems and human health. Specifically, a lead-free welding process is adopted to reduce pollution risks during production. Outer package is made of recyclable paper materials, which facilitates reuse and reduces waste generation. These measures minimize environmental impacts from product manufacturing to waste disposal, enhance product recyclability, and coincide with the circular economy concept, boosting green and sustainable development of the industry.

### High reliability and long service life

The structural design reaches high protection grades of up to IP65 and IP66, which can effectively withstand complex outdoor environmental challenges, such as wind, sand, rain and dust. Furthermore, high-durability materials are selected to ensure stable performance of equipment during long-term operation, with reduced aging and damage. Such a high-reliability and long-life design significantly reduces the equipment replacement frequency, curbs resource waste, energy consumption and waste discharge caused by frequent equipment replacements, increases the resource use efficiency throughout the whole equipment lifecycle, and provides stable and reliable clean energy solutions for users, lowering use costs and environmental pressure.

### Easy installation & maintenance and energy equity

The compact structural design makes inverters small and lightweight, like wall-mounted or outdoor-integrated units, which greatly reduces the difficulty and barriers to deploy photovoltaic systems, so that users are easy to install and apply inverters whether in urban, rural or remote areas. Meanwhile, the optimized structural design simplifies inverter installation and maintenance process, especially in rural or remote areas, where local residents can perform routine equipment maintenance and simple troubleshooting effortlessly, even without professional tools or complex techniques. This ensures long-term stable operation, facilitates broader access to clean energy, and promotes energy equity by allowing more people to benefit from solar power, advancing world-wide application of renewable energy.

### Automated production and supply chain optimization

The inverter's structural design is optimized in a scientific manner to better adapt to digital and automated production technologies Advanced automated equipment and intelligent production flow are introduced in the manufacturing process to improve the production efficiency, and shorten the product manufacturing cycle, meeting growing market demands for green energy products. Meanwhile, supply chain management for inverter production is optimized to make supply chains intelligent, transparent and efficient. The intelligent supply chain management system precisely regulates raw material procurement, production planning and logistics, and ensure controllable product quality, optimal costs and timely delivery, laying a solid foundation for market promotion and large-scale development of Sineng Electric's green products.



#### **Product Certification**

Value-Driven, Long-Term

Commitment

**Building a Greener** 

**Future Together** 

#### Centralized energy storage converter is certified by TÜV Rheinland

On April 13, 2024, Sineng Electric's 2MW series energy storage converter successfully passed rigorous tests of Germany TÜV Rheinland, and obtained the EMC (Electromagnetic Compatibility) certification. This marks that Sineng Electric's products can maintain stable performance even in complex electromagnetic environments, with a reliability and safety in line with international market standards.

As a key participant and practitioner in global energy transition, Sineng Electric always upholds innovation-driven R&D at its strategic core and a customer-centric value, and expands its overseas market presence in both breadth and depth. Over the years, the Company has obtained authoritative certifications from multiple institutions, including China Quality Certification Centre, Power (Beijing) Product Certification Centre and China General Certification Centre, and committed to building a zero-carbon future together with more partners.





### Protection of Intellectual **Property Rights**

Intellectual property policy

Market-oriented value

Innovation-driven development

Compliance-based operation

IP-empowered growth

Becoming a world-class power supply enterprise



#### Construction of intellectual property management system

To enhance its intellectual property management and innovation capabilities, Sineng Electric implements the Enterprise Intellectual Property Compliance Management System—Requirements (GB/T 29490-2023) in earnest, and formulates the Intellectual Property Management Manual, which covers operational guidelines for intellectual property application, review, maintenance, utilization, protection and dispute resolution. Through regular intellectual property risk assessments for R&D, production. sales and other business activities, the Company identifies potential risks of infringing patents and patents of being infringed upon, formulates response strategies, and establishes rapid response mechanisms to address infringement incidents promptly.

To encourage employee innovation, promote the commercialization of technological achievements, and enhance its technological accumulation and market competitiveness, the Company establishes the Intellectual Property Reward System to reward and incentivize employees who demonstrate outstanding performance in intellectual property management, boosting their motivation. In 2024, the Company granted rewards for 100 intellectual property projects (including patents and software copyrights).



The Company has passed the intellectual property compliance management system certification.

#### Case: Sineng Electric is awarded a "National Intellectual Property Advantage Enterprise"

By virtue of its outstanding technological innovation capabilities and intellectual property management strength, Sineng Electric was awarded a "National Intellectual Property Advantage Enterprise" by China National Intellectual Property Administration (CNIPA). The appraisal of "National Intellectual Property Advantage Enterprises", as the highest national honour for emerging benchmarking intellectual property creation demonstration enterprises, is organized by CNIPA to advance and develop strategic emerging industries, and effectively enhance their intellectual property creation, application, protection and management capabilities, marking Sineng Electric's exceptional achievements and distinguished performance in the field of intellectual property.



In the future, Sineng Electric will take full advantage of its own intellectual property rights, further carry forward the spirit of innovation, and lead the development of the new energy industry with its high-level technological innovation and outstanding comprehensive strength, facilitating global zero-carbon energy transition and upgrades, and contributing to building a green and low-carbon future.

## **Building a Greener Future Together**

This section highlights Sineng Electric's proactive efforts and notable achievements in environmental protection. The Company has established a robust environmental management system and obtained ISO 14001 Environmental Management System certification. In addressing climate change, Sineng Electric has implemented initiatives such as product carbon footprint assessments to accurately monitor and reduce emissions across the product lifecycle, supporting the global low-carbon transition. Meanwhile, the Company has made remarkable progress in energy management, and emissions and waste management. Through energy-saving measures and resource recycling initiatives, Sineng Electric has effectively reduced energy consumption and minimized environmental impact throughout its operations, contributing to the creation of a greener ecosystem.

- Environmental Management
- Response to Climate Change
- **Energy Management**
- Emissions and Waste Management



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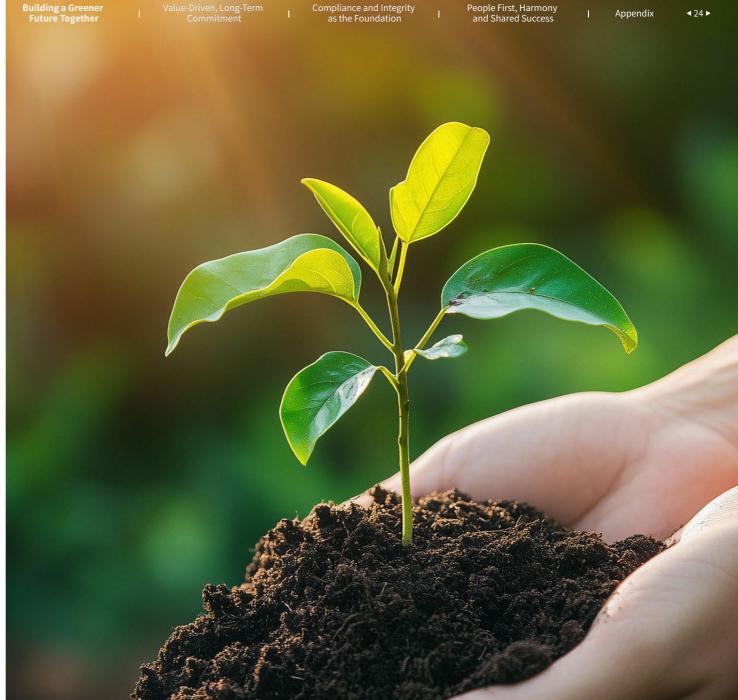
### **Environmental Management**

#### Construction of the Environmental **Management System**

To enhance its environmental management capabilities and effectively prevent pollution, Sineng Electric has established a comprehensive environmental management system and integrated it into daily management. The Company has successfully obtained ISO 14001 Environmental Management System certification. It maintains operational records of its environmental protection facilities and establishes environmental archives. In addition, Sineng Electric has developed a well-structured emergency response plan for environmental pollution incidents and conducts regular drills to ensure preparedness.



The Company has obtained ISO 14001 Environmental Management System certification.





#### Green Manufacturing

**Building a Greener** 

**Future Together** 

Sineng Electric strategically integrates the concepts of environmental protection and resource conservation into the entire product lifecycle. The Company has built smart workshops to promote low-carbon, high-efficiency production of green products. It also implements standardized recycling practices to enhance resource utilization.



#### Energy conservation, emissions reduction, and resource utilization

Through technological upgrades and process optimization in manufacturing, Sineng Electric improves equipment efficiency and reduces energy consumption.



#### Pollutant and emissions management

The Company strictly adheres to national environmental laws and regulations, ensuring the standardized treatment and compliant discharge of exhaust gas, wastewater, and solid waste. For example, exhaust gas is collected and treated before compliant discharge; wastewater is processed to meet discharge standards; and solid waste is sorted for recycling and reuse.



#### **Green procurement**

Sineng Electric promotes a green procurement policy, prioritizing environmentally friendly and recyclable materials. It also evaluates suppliers' environmental performance to encourage the adoption of low-carbon production among suppliers.



#### **Employee training and cultural construction**

Regular environmental training and awareness campaigns are organized to enhance employees' environmental consciousness. In addition, internal performance evaluation and incentive systems are in place to encourage active participation in energy conservation, emissions reduction and environmental protection.



#### Government engagement and public disclosure

Sineng Electric actively communicates with local communities and government agencies to regularly seek feedback for improvements in environmental management. The Company also discloses progress and outcomes in environmental compliance management through Environmental, Social, and Governance (ESG) reports and other channels.



#### Case: Mountain-based Carbon Reduction, Improving People's Livelihood

In July 2024, Sineng Electric supported the successful initial grid connection of the 100MW mountain-based PV project in Yu County of China Three Gorges Renewables (Group) Co., Ltd. The project adopted Sineng Electric's 320kW string inverters, effectively increasing the power generation efficiency of the mountain-based solar power plant.



#### One Station, Less Carbon Emissions

Located in Yu County, Yangquan, Shanxi Province, the mountain-based PV project of China Three Gorges Renewables (Group) Co., Ltd. covers an area of 3,498.26 mu, with a planned installed capacity of 100 MW. Once completed, the project is expected to generate 170 million kWh of electricity annually, saving approximately 50,000 tons of standard coal and reducing 140,000 tons of CO<sub>2</sub> emissions each year, thereby contributing to the region's green energy transition.



Annual power generation

170 million kWh



Standard coal saved annually

**50, 000** tons



CO<sub>2</sub> emissions reduced annually

140, 000 tons

#### Supporting Summer Energy Demand, Benefiting Local Communities

During the construction phase, the 100MW mountain-based PV project of China Three Gorges Renewables (Group) Co., Ltd. created more than 300 jobs for surrounding communities, effectively easing local employment pressure. On the infrastructure front, the project focused on improving transportation conditions by constructing and upgrading about 70 kilometers of roads, significantly enhancing connectivity and accessibility of the local transportation network. These efforts not only improved the quality of life for local residents but also laid a solid foundation of public support and social environment for the project's successful grid connection.

### Response to Climate Change

Sineng Electric recognizes that climate-related risks and opportunities have a profound impact on its business operations and value chain. In response, the Company has adopted the disclosure recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) structured around the four pillars—governance, strategy, risk management, and metrics & targets. It is committed to enhancing its climate-related management capabilities and information disclosure level. Specifically:



#### Governance

Sineng Electric has established a robust corporate governance structure to ensure effective execution of climate-related decisions. The Board of Directors is responsible for formulating and overseeing the Company's long-term development strategies and goals, including initiatives addressing climate change. The Company has also developed comprehensive internal management systems and procedures to ensure cross-departmental coordination in its Response to climate change efforts.



#### Strategy

Sineng Electric regards carbon neutrality and climate change response as key strategic priorities. The Company is committed to reducing carbon emissions throughout the entire product lifecycle through technological innovation and product optimization, thereby promoting green and low-carbon development across the industry. Sineng Electric actively monitors global climate trends and evolving regulatory policies, and adjusts its strategic direction accordingly to maintain a competitive edge in the market. Meanwhile, the Company continues to increase investment in R&D, focusing on the development of high-efficiency, low-energy-consumption products and technologies. Additionally, it proactively expands its global presence, embedding the green, low-carbon concept into its international development strategy. In terms of market layout, the Company continuously advances its global strategy and refines its sales and service network worldwide, covering regions including Asia-Pacific, the Middle East, Africa, Europe, and the Americas, contributing to the global transition toward clean energy.



### **Risk Management**

Fully aware of the significance of risks posed by climate change, Sineng Electric has established a robust risk management system to identify, assess, and respond to climate-related risks. The Company conducts regular risk assessments to analyze the potential impacts of climate change on its business operations, including policy, market, and technology risks. To address these risks, Sineng Electric has developed corresponding mitigation measures. In terms of policy risks, the Company closely monitors climate-related policies and regulations introduced by governments around the world, and promptly adjusts its business strategies to ensure compliance. Regarding market risks, Sineng Electric diversifies its product and service portfolio to reduce reliance on any single market and enhance market adaptability. As to technology risks, the Company continues to invest in technological innovation and maintains a leading position to meet the challenges brought by rapid technological change.



#### **Metrics and Targets**

Sineng Electric has established clear metrics and targets to guide its climate-related actions. The Company has set carbon footprint reduction targets for its products and strives to lower lifecycle carbon emissions through optimized product design, improved manufacturing processes, and enhanced energy efficiency. In production, Sineng Electric has defined reduction targets for energy consumption and greenhouse gas (GHG) emissions. It deploys energy-efficient equipment and integrates renewable energy sources to actively curb emissions from its production activities. In addition, the Company engages in the formulation of industry standards and certification initiatives to promote sustainable development across the industry. Moreover, it has set targets to improve resource efficiency and reduce waste generation, minimizing environmental impact through strengthened resource management and waste treatment practices.

#### **Product Carbon Footprint**

#### Carbon Footprint Certification for 320/350kW PV Inverters

On May 14, 2024, Sineng Electric conducted cradle-to-gate product carbon footprint assessments for its inverter products including SP-320K-HB, EP-3125-HC-UD, and EP-3300-HA-UD in accordance with the ISO 14067-1:2018 standard. The assessments covered all stages from raw material sourcing and manufacturing to the point of factory delivery, aiming to provide a comprehensive evaluation of carbon emissions across the product lifecycle, and offer a scientific basis for future emissions reduction efforts and continuous improvement.

By performing product carbon footprint accounting, Sineng Electric can accurately identify key emission hotspots throughout the product lifecycle and implement targeted reduction measures, such as optimizing product design, refining production processes, enhancing energy efficiency, and adopting low-carbon raw materials. Moving forward, the Company will expand carbon footprint assessments to more product lines, further identifying and reducing product carbon emissions, contributing to climate change mitigation, and achieving sustainable development.



Sineng Electric's 320/350kW PV inverters have been awarded ISO 14067 product carbon footprint certification.

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### **Energy Management**

# Establishment of the Energy Management System

To reduce energy consumption, enhance energy efficiency, and advance the Company's energy conservation and emission reduction efforts, Sineng Electric has established a systematic energy management framework, formed a dedicated energy conservation leadership team, and clearly defined energy management objectives, responsibilities, and procedures, ensuring a structured approach to energy management and effective control over energy consumption. To institutionalize, standardize, and normalize energy management practices, Sineng Electric actively promotes the implementation and continuous improvement of the energy management system in accordance with GB/T 23331-2020 / ISO 50001:2018.



The Company has been certified under the ISO 50001 Energy Management System.

Under the guidance and coordination of the energy conservation leadership team, Sineng Electric has established corresponding management regulations for energy acquisition, conversion, distribution, and usage respectively. These regulations comprehensively cover energy procurement, measurement, statistics, production process management, and quota-based evaluations, facilitating the effective implementation of energy conservation initiatives.



#### **Equipment Energy Conservation Management**

Value-Driven, Long-Term

Commitment

Sineng Electric has implemented energy-saving modifications and optimizations for various equipment used in the production process, enhancing energy efficiency and reducing consumption during operations. For instance, the Company has adopted energy-efficient motors, transformers, and other devices, while optimizing operational parameters to minimize standby and no-load losses.

#### **Employee Energy Conservation Awareness Training**

The Company has enhanced energy conservation awareness training for employees to deepen their understanding of the importance of energy management. Employees are encouraged to develop energy-saving habits and minimize waste by integrating energy-efficient practices into their daily work, promoting a culture of participation at all levels.



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#### Case: Thermal Energy Collection and Utilization in the Aging Room

The process of product aging test generates a consideration amount of heat, which must be extracted and discharged to maintain appropriate ambient temperature. Considering the issue of pipeline freezing in water spray equipment during winter, Sineng Electric modified the ventilation system in the aging room by redirecting hot air from the aging room to the water spray room, thereby enabling thermal energy reuse. This innovative approach to thermal energy management and equipment optimization not only effectively prevents the freezing of water spray equipment during winter but also promotes efficient energy use, reducing overall energy consumption while improving production efficiency and environmental performance.





#### Case: Water Recycling in the Water Spray Room

Sineng Electric constructed three underground water storage tanks in the spray testing area to collect used water via drainage channels, and the collected water undergoes multi-stage filtration for reuse. This design effectively addresses water waste, achieving a 95% reduction in annual water consumption for product spray testing. It demonstrates Sineng Electric's strong commitment to energy conservation, emission reduction, and resource recycling through practical and effective action.



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### **Emissions and Waste Management**

Management

Sineng Electric has established a comprehensive standard system for emissions and waste management, with clearly defined standards and measures covering regulations, prevention, monitoring, and disposal.

#### **Exhaust Gas Management**

Sineng Electric follows the local environmental standard of Jiangsu Province, the Integrated Emission Standard of Air Pollutants (DB32/4041-2021), for the organized emissions of tin and its compounds, particulate matter (paint mist), and non-methane hydrocarbons, and the unorganized emissions of other pollutants at the plant boundary and within the plant area.

Exhaust gas generated from laser coding, reflow soldering, and other processes is collected via enclosed systems and treated using a filter cartridge dust removal unit combined with a secondary activated carbon adsorption system, before being discharged through a 28-meter-high exhaust stack (FQ1). Kitchen fumes are processed through a fume purifier prior to emission. Any uncaptured exhaust gas is released as non-organized emissions.

Exhaust gas is monitored once a year to ensure compliance with applicable emission standards.



#### **Wastewater Management**

Sineng Electric entrusts a qualified company to management the treatment of employee domestic wastewater. The treatment process adheres to the Integrated Wastewater Discharge Standard (GB8978-1996) for COD, SS, and animal/vegetable oil, to the Wastewater Quality Standards for Discharge to Municipal Sewers (GB/T 31962-2015) for ammonia nitrogen, total phosphorus, and total nitrogen, to the Discharge Standard of Main Water Pollutants for Municipal Wastewater Treatment Plant and Key Industries of Taihu Area (DB32/1072-2018) for effluent from the wastewater treatment plant, and to the Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant (GB18918-2002) for other parameters.

Domestic wastewater is first treated in a septic tank before being handed over for further treatment.

Wastewater is monitored once a year to ensure compliance with the discharge standards.



#### **Noise Management**

Sineng Electric ensures that the noise generated by equipment meets the Class 3 limits specified in the Emission Standard for Industrial Enterprises Noise at Boundary (GB12348-2008).

The Company reduces noise levels through building sound insulation and distance attenuation.

Noise monitoring is conducted once per quarter to ensure compliance with noise emission standards



#### **Solid Waste Management**

Sineng Electric clearly distinguishes between hazardous waste and general solid waste.

Hazardous waste is disposed of regularly by qualified disposal units to ensure safe and professional treatment. General solid waste is collected by recycling companies to enable resource reuse.



# Value-Driven, Long-Term Commitment

This section highlights Sineng Electric's best practices in creating customer value, promoting supply chain sustainability, and accelerating digital transformation. Committed to a quality-first approach, the Company has established a full-lifecycle quality traceability mechanism to ensure product reliability and customer satisfaction. In customer service, Sineng Électric delivers lifecycle services from installation guidance to customer training, continuously creating value for its customers. Moreover, through digital transformation, the Company has introduced advanced systems such as MES, SAP, and WMS that enable real-time monitoring of production processes, data collection, and system optimization, significantly enhancing operational efficiency and management capabilities. In supply chain management, Sineng Electric applies strict selection criteria and full-lifecycle management for its suppliers, driving continuous improvement in product quality and delivery performance while ensuring supply chain stability. The launch of a one-stop digital procurement management platform further reinforces the foundation for the Company's sustainable development.

- Product Quality and Safety
- Customer Service
- **Supply Chain Management**
- Digitalization



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### **Product Quality and Safety**

#### **Quality Management System Development**

Sineng Electric has always regarded product quality as a core competitive strength in its business development. By integrating a scientific quality management system, digital technologies, and a company-wide quality culture, the Company continuously enhances product reliability and customer satisfaction, establishing itself as a benchmark in the industry.

#### Quality Policy

Sineng Electric upholds the customer-centric quality policy of "meticulous" management to ensure product excellence; integrity in business to continuously enhance customer satisfaction", embedding quality management throughout the entire process from R&D and production to service delivery.

Standard system

**Traceability** 

mechanism

Core

philosophy

The Company strictly follows the ISO 9001 Quality Management System and IEC international standards. For core products such as PV inverters and energy storage systems, it has established internal control standards that exceed industry benchmarks.

Sineng Electric has implemented a full-lifecycle quality traceability mechanism that covers product design, raw material procurement, manufacturing, delivery, and operation & maintenance, realizing closed-loop management from prevention to continuous improvement.



The Company has obtained ISO 9001 Quality Management System certification.



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#### Quality Management

Sineng Electric adopts the "Three Stricts" principle: strict supplier access control, strict production process control, and stringent testing and verification.



#### Strict supplier access control

The Company leverages an intelligent supply chain management system to dynamically evaluate suppliers, and ensures that key components pass AEC-0101 automotive-grade reliability testing.



#### **Strict production** process control

Automated inspection equipment is introduced into the production process to enable real-time data collection and anomaly alerts for key procedures such as PCBA soldering and final product assembly.



#### **Stringent testing** and verification

A global testing and verification center has been established to simulate extreme conditions such as high temperature, high humidity, and salt spray, and conduct accelerated aging tests to ensure stable product performance over a 25-year lifecycle.

#### Quality Improvement Actions



Sineng Electric optimizes circuit topology through DFMEA (Design Failure Mode and Effects Analysis), reducing inverter failure rates to below 0.2%. By implementing Lean Six Sigma projects, it has shortened product delivery cycles by 30%.



A company-wide quality points system has been established to encourage employee involvement in QC team activities, fostering a culture where "everyone is a quality officer".

#### Quality Management

Sineng Electric actively promotes the digital transformation of quality management:

#### AI-based visual inspection



Deep learning-powered visual inspection systems are deployed on the production lines to evaluate component placement and soldering quality on circuit boards within milliseconds, achieving a miss rate below 0.01%.

#### Online quality monitoring cloud platform



Leveraging IoT technology, the Company collects real-time operational data from globally deployed devices, and predicts potential faults through big data analytics, achieving an 85% remote diagnosis and repair rate and reducing customer downtime by

#### **Digital twin** and simulation optimization



Digital twin models are built for products to simulate extreme conditions in virtual environments. This allows early identification of design flaws and has shortened the new product development cycle by 40%.



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#### **Product Traceability Management**

Sineng Electric has established a refined traceability system that covers the entire process from incoming materials to production and delivery, achieving full-lifecycle transparency from raw materials to end products. This has significantly enhanced the efficiency of quality issue identification and resolution, providing customers with highly reliable product assurance.

#### Incoming Material Inspection







### Batch-based identification management

Sineng Electric implements batch-based identification management for raw materials and key components. Relying on its intelligent supply chain platform, the Company requires suppliers to provide complete batch information upon delivery, including production dates, inspection reports, and raw material sources. This information is then linked to the ERP system through QR codes or RFID tags.

### Key component inspection

Key components such as IGBT modules and capacitors must pass AEC-Q101 automotive-grade certification and undergo secondary inspection upon warehouse entry. Inspection data is uploaded in real time to the quality database, forming a digital archive with unique traceability codes for each item.

### Supplier collaboration

Through blockchain technology, Sineng Electric has established a supplier quality data sharing platform, enabling end-to-end traceability of critical materials from supplier production to the Company's warehouse. This ensures that problematic materials can be quickly identified and traced to their source.

#### Manufacturing





### Process-level traceability

Sineng Electric assigns a unique serial number to each product as it enters the production line, linking it to work orders, process parameters, and operator information. For example, during the PCBA soldering process, critical parameters such as soldering temperature and time are automatically recorded and associated with the corresponding circuit board serial number.



### Integrated quality data

The Company adopts automated inspection equipment, such as AOI (Automated Optical Inspection) systems and online electrical performance testers, to collect inspection results in real time and synchronize them to the cloud. Abnormal data triggers alerts and the system automatically generates traceability reports.



# Semi-finished product management

Key semi-finished products, such as inverter modules, are assigned independent codes to ensure traceability across assembly, testing, and temporary storage stages.



#### Finished Product Delivery

Empowerment through

Technology and Innovation



Each device is labeled with a unique QR code containing data such as product model, production batch, key component suppliers, and test reports, all accessible to customers via a single scan.

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**Future Together** 



The Company's system is integrated with the logistics service provider's system to monitor transportation conditions such as temperature, humidity, and vibration in real time, ensuring quality control throughout the delivery process.

Clientside traceability

Through its IoT platform, the Company remotely connects to deployed devices to monitor operating conditions in real time, and swiftly locates faults by referencing historical production data. For example, if an inverter fault occurs at an overseas solar plant, Sineng Electric's engineers can retrieve the device's bill of materials, production records, and test data within 10 minutes using the serial number, enabling precise root cause analysis.

#### Digital Upgrade

Value-Driven, Long-Term

Commitment

#### Quality traceability big data platform

The platform integrates data from ERP, MES, SCM (Supply Chain Management), and CRM systems, enabling seamless information flow across departments and process stages.

#### **Rapid response**

When a quality issue arises, the system can automatically generate an impact analysis report that covers affected batches, customers, and inventory, reducing the traditional traceability cycle from 48 hours to under 2 hours.

#### **Risk prediction**

An AI model is built based on historical traceability data to predict potential quality risks and proactively optimize processes. For example, by analyzing failure data of a specific capacitor model across multiple batches, the Company worked with its supplier to improve the packaging process, resulting in a 12% increase in yield rate.



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#### **Customer Service**

# **Full-lifecycle Services**



#### Installation guidance service

After the product arrives at the project site, Singneg Electric's service engineers provide technical briefing and training to local technicians and construction personnel, ensuring they understand the wiring methods and relevant requirements, and offer guidance and support for subsequent installation work.



#### **Commissioning and** grid-connection service

After product wiring is completed, the service engineers perform standalone commissioning to ensure the equipment operates properly. When the entire plant is ready for grid connection, the service engineers coordinate with the plant and other equipment providers for system-wide joint commissioning, ensuring stable operation of the Company's products within the overall power generation system.



#### **In-warranty** maintenance service

After the product is successfully connected to the grid, Sineng Electric's service personnel work closely with the power plant's operation and maintenance personnel. If any issue arises during equipment operation, the power plant's operation and maintenance personnel report it to the regional service personnel. Remote support is provided as a first response; if the issue cannot be resolved remotely, on-site maintenance will be promptly arranged.



#### **Out-of-warranty** maintenance service

Beyond the warranty period, Sineng Electric offers a variety of options such as extended warranty, one-time repairs, spare parts sales, and technical upgrades, continuously creating added value for customers.



#### Customer training service

Sineng Electric empowers customers' operation and maintenance teams through multi-dimensional training. At the site of power plants, its service personnel deliver operational training to local operation and maintenance personnel; at the headquarters' training center, technical support and R&D teams provide training on product principles and maintenance to customers' technical personnel, boosting their technical competence and operation & maintenance capabilities.

#### **Service Commitment**

Sineng Electric is customer-centric and committed to delivering efficient and timely after-sales service as follows:



#### Response within 4 hours

Upon receiving a service request, Sineng Electric responds within 4 hours to understand the issue and provide an initial solution.



#### On-site support within 24 hours

For issues that require on-site intervention, service personnel will arrive at the customer's site within 24 hours and quickly commence repair work.



#### Product recovery within 72 hours

Once on site, service personnel will make every effort to complete repairs and restore the product to normal operation within 72 hours, minimizing disruption to the customer.



#### **Customer Satisfaction**

Sineng Electric conducts quarterly customer satisfaction surveys to assess the quality, performance, and after-sales service of its products. The Company first defines target customers, customer types, completion time, and responsible persons for the survey, then send the questionnaires online to the target customers, and classifies customer feedback. Responsible departments then conduct root cause analysis and offer improvement plans.

Sineng Electric implements customer satisfaction surveys regularly as an on-going effort to continuously gather customer feedback. Through systematic customer satisfaction surveys and closed-loop management process, the Company gains a deeper understanding of customer needs, promptly identifies and resolves product and service issues, continuously optimizes product performance, enhances service quality, and strengthens customer satisfaction and loyalty, thereby maintaining a competitive edge and achieving sustainable development.

In 2024, the customer satisfaction survey results showed an 89% customer satisfaction rate, with improvements and enhancements made based on customer feedback.



Customer satisfaction rate 89%



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# **Supply Chain management**

## Supplier Lifecycle Management

Sineng Electric implements strict selection and management of its suppliers through a comprehensive supplier management system. From qualification review and sample evaluation to volume supply and ongoing cooperation, the Company applies rigorous evaluation standards and monitoring mechanisms. Regular audits and assessments are conducted to ensure suppliers provide raw materials and components that meet quality requirements, while continuously improving their product quality and delivery performance.

#### Supplier onboarding phase

- Qualification review: Conduct rigorous qualification reviews of potential suppliers to ensure they possess valid business licenses and the necessary production capabilities.
- **Sample evaluation:** Require suppliers to submit samples for evaluation to ensure compliance with the Company's quality and technical standards.



#### Supplier collaboration phase

- **Establishing partnership:** Sign contracts with suppliers to clearly define the responsibilities and expectations of both parties, ensuring smooth collaboration.
- **Information sharing:** Leverage a digital procurement management platform for information sharing, communication and coordination, enhancing cooperation efficiency.
- **Risk control:** Perform risk assessments on suppliers and establish corresponding risk management measures to ensure supply chain stability.



#### Supplier performance evaluation

- Regular assessments: Evaluate supplier performance on a regular basis, covering areas such as product quality, delivery capability, price competitiveness, and service level.
- Continuous improvement: Require suppliers to continuously improve product quality and delivery performance, with necessary support and training provided by the Company.



#### Supplier exit phase

- Performance evaluation: Conduct a final performance assessment to determine whether to continue the partnership.
- Contract termination: Terminate contracts with under-performing or non-compliant suppliers and carry out the exit procedures.



# Sustainable Procurement Management

Sineng Electric has established procedural documents and systems such as the Supplier Selection, Admission, and Evaluation Management Procedure and the Supplier Performance Assessment and Review Control Procedure, setting clear requirements for suppliers' management system certification, hazardous substance restrictions, and RoHS testing. When signing supply agreements, Sineng Electric requires suppliers to sign documents including the RoHS Compliance Guarantee, the Environmental, Health, and Safety Agreement, and the Commitment Letter on Non-use of Conflict Minerals, ensuring that the supplied raw materials comply with the latest international environmental standards and relevant directives regarding substance content and properties. The Company also requires suppliers to embed eco-design principles into their business operations, and to monitor and manage their resource and energy consumption, pollutant emissions, and use of hazardous substances.



#### Case: Sineng Electric Awarded "Green Supply Chain Management Enterprise"

In 2024, Sineng Electric was selected as a "Green Supply Chain Management Enterprise" by the Ministry of Industry and Information Technology of China. The "Green Supply Chain Management Enterprise" initiative is one of the three pillars of China's green manufacturing system, aiming to encourage enterprises to integrate environmental protection and resource conservation throughout the entire production process and achieve coordinated improvements across the entire supply chain. This process not only helps enterprises improve resource utilization efficiency and enhance market competitiveness but also promotes the overall green development of industry, contributing to the achievement of carbon peaking and carbon neutrality goals in the industrial sector.

# **Digital Procurement Platform**

Sineng Electric operates across multiple sectors, including PV inverters, energy storage systems, digital power, and power plant development. With a large procurement scale, diverse categories, multiple usage scenarios, and high frequency, the Company officially launched a one-stop digital procurement management platform to tackle growing procurement complexity.

On one hand, the platform supports full-lifecycle, closed-loop supplier management from registration, certification, and classification to electronic archives, qualification management, performance evaluation, supplier promotion or demotion, and elimination, enhancing the precision of supplier management.

On the other hand, the platform bridges digital gaps across the entire procurement cycle, including supplier management, demand management, sourcing, order handling, delivery tracking, quality management, and financial systems, forming an end-to-end electronic, automated, and visualized management system.



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# **Digitalization Construction**

Sineng Electric is committed to building a model smart factory by advancing automation, smart manufacturing, digital integration, and intelligent transformation, and accelerates its comprehensive digital transformation. With outstanding achievements in digitalization, the Company has been honored with multiple accolades, including "Jiangsu Province Internet Benchmark Factory", "Jiangsu Intelligent Manufacturing Demonstration Workshop", "Smart PV Pilot Demonstration Enterprise", and "AA-level Integration of Informatization and Industrialization System Certification".

### **Application systems**

#### MES system

As the core of Sineng Electric's digital transformation, the MES system has been widely deployed across multiple production bases. It enables real-time monitoring. data collection, and analysis throughout the manufacturing cost, process, and quality.

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#### SAP system

The SAP system plays a vital role in Sineng Electric's digital management. By integrating data across finance, procurement, and sales functions, the system realizes efficient information flow and collaborative operations, ultimately enhancing the Company's overall operational efficiency.

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#### WMS system

The WMS system has greatly improved the precision and efficiency of warehouse operations. With barcode-based inventory control, the system reduces errors and confusion in material handling, accelerates material turnover, and ensures inventory

#### SRM system

Sineng Electric has developed a unified and comprehensive electronic procurement management platform to enhance coordination and collaboration across internal and external supply chain resources. The platform supports full-lifecycle supplier management, including online sourcing, quotation comparison, and bidding. It enables end-to-end digital coordination, covering everything from demand planning, sourcing, contract signing, and order fulfillment to logistics and invoice settlement, ensuring full-process traceability throughout the

#### CRM after-sales service platform

By integrating customer data with sales projects, the CRM platform optimizes after-sales service processes and improves management efficiency. It consolidates customer profiles, order history, service records, and spare parts data into a unified database, allowing the service team to respond quickly to customer needs and build a customer-centric sustainable service system.

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#### **Value Outcomes**

#### Improved production and operational efficiency

Through digitalization, Sineng Electric has achieved real-time monitoring, data acquisition, and system optimization across its production processes, and enhanced process control and transparency, resulting in overall improvements in production efficiency and notable reductions in manufacturing cycle. For example, it has shortened delivery-to-receipt cycle by 3 days, material preparation and retrieval time by 1 day, and manufacturing cycle by 2 days, leading to a total reduction of 6 days in order fulfillment cycle.

#### **Enhanced quality control capabilities**

A comprehensive quality traceability mechanism has been established, covering the entire process from raw material procurement to finished product delivery, with a 100% traceability rate. In the event of a quality issue, the mechanism enables rapid root cause identification and prompt corrective action. By strengthening process quality management and loading control of critical materials, the Company has increased its product first-pass rate from 87% to 92%, boosting product reliability and market competitiveness. Additionally, the response time to quality issues has been reduced to less than half a day, ensuring rapid problem resolution and minimizing disruptions to production and deliverv.

#### Innovation in products and services

Sineng Electric has upgraded its power quality business to digital power, and introduced digital power solutions covering both high- and low-voltage distribution networks. These solutions effectively address complex challenges in power system operations, such as grid harmonics, reactive power, and dynamic voltage issues, help reduce power loss and extend equipment lifespan. Centered around precise harmonic control, millisecond-level dynamic voltage regulation, and intelligent energy efficiency optimization, the digital power solutions provide a highly reliable energy foundation for data centers. Sineng Electric has already established deep cooperation with several leading enterprises in this area.



# **Compliance and** Integrity as the Foundation

This section provides a detailed overview of Sineng Electric's comprehensive measures and notable achievements in corporate governance, internal control, integrity development, and information security and privacy protection. The Company strictly adheres to relevant laws and regulations, continuously optimizes its governance structure to ensure stable and compliant business operations. By establishing robust integrity systems and internal supervision and whistleblowing mechanisms, it effectively mitigates various risks and fosters an environment for healthy development. At the same time, Sineng Electric places great importance on information security and privacy protection, having successfully obtained ISO 27001 Information Security Management System certification. It has also implemented a suite of information security management policies, including the Information Security Management Manual, to build a strong defense for information security and ensure the smooth advancement of business activities.

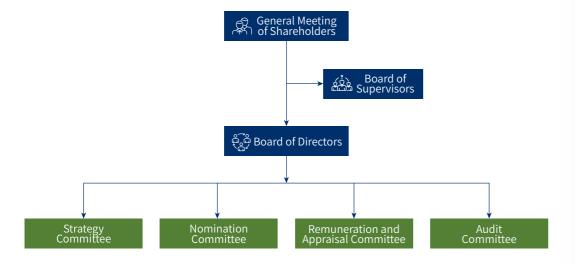
- Corporate Governance System
- Internal Control
- Integrity Development
- Information Security and Privacy Protection



# **Corporate Governance System**

Sineng Electric strictly follows the requirements of the Company Law, the Securities Law, the Code of Corporate Governance for Listed Companies, the Rules Governing the Listing of Shares on ChiNext Market of Shenzhen Stock Exchange, and the Self-Regulatory Guidelines No.2 for Listed Companies on the Shenzhen Stock Exchange – Standardized Operation of ChiNext Market Listed Companies, among other relevant laws, regulations, and normative documents. The Company continuously improves its corporate governance structure, standardizes its operations, and strengthens lawful and compliant information disclosure, enhancing the overall corporate governance level.

### Governance Structure of the "Three Meetings"



#### **General Meeting of Shareholders**



Sineng Electric duly convenes and holds general meetings of shareholders in strict compliance with the *Company Law*, the *Rules for the General Meeting of Shareholders of Listed Companies*, the *Articles of Association*, the *Rules of Procedure for the General Meeting of Shareholders*, and other relevant laws, regulations, normative documents, and internal policies. To facilitate participation by minority shareholders, the Company provides online voting channels in parallel with the physical meetings and engages legal counsel to witness the meetings on site. These measures ensure that the procedures for convening, conducting, and voting at the general meetings of shareholders comply with applicable laws and regulations, thereby safeguarding the interests of all shareholders, particularly minority shareholders.

#### **Board of Directors**



The Company strictly complies with the Rules of Procedure for the Board of Directors, the Working System for Independent Directors, and the Self-Regulatory Guidelines No.2 for Listed Companies on the Shenzhen Stock Exchange – Standardized Operation of ChiNext Market Listed Companies. Members of the Board attend meetings punctually, and the Board's specialized committees diligently fulfill their duties and responsibilities. Board members actively participate in relevant training organized by the Company to stay well-versed in applicable laws and regulations. During the reporting period, the Board of Directors faithfully implemented resolutions of the general meetings of shareholders. All directors exercised due diligence and provided valuable input on the Company's strategic development and day-to-day operations.

#### **Board of Supervisors**



Sineng Electric strictly complies with the *Articles of Association* and the *Rules of Procedure for the Board of Supervisors*, among other relevant regulations and requirements. Members of the Board of Supervisors fulfill their duties with diligence, reviewing the Company's periodic reports and overseeing matters such as business operations, use of raised funds, financial status, and the performance of duties by directors and senior management, thereby effectively safeguarding the lawful interests of the Company and its shareholders. Additionally, supervisors actively participate in various training programs to enhance their ability to perform their supervisory responsibilities.

# Operation of the "Three Meetings"

In 2024, Sineng Electric convened one general meeting of shareholders, at which a total of 18 proposals were reviewed. The Board of Directors held 10 meetings, reviewing 43 proposals, while the Board of Supervisors held 10 meetings, reviewing 29 proposals.

The Board of Directors has four specialized committees: the Remuneration and Appraisal Committee, the Strategy Committee, the Nomination Committee, and the Audit Committee. In 2024, the Remuneration and Appraisal Committee held four meetings, the Strategy Committee held one meeting, the Nomination Committee held two meetings, and the Audit Committee held three meetings. These meetings reviewed key matters such as the re-election of members of the Board of Directors and the Board of Supervisors, the share repurchase plan, the attribution of equity incentives, the attribution of the 2022 restricted stock incentive plan, and the formulation and revision of relevant internal policies.

In accordance with the newly issued Administrative Measures for Independent Directors of Listed Companies, the Company established a dedicated meeting mechanism for independent directors. In 2024, four such meetings were held, at which independent directors expressed independent opinions on major matters such as the equity incentive plan. All directors, supervisors, and senior management personnel attended relevant meetings in strict compliance with applicable laws and regulations, diligently fulfilling their duties and offering valuable advice on the Company's strategic development and daily operations.



#### **Investor Relations**

Sineng Electric places great importance on investor relations and continues to enhance its investor communication mechanisms. It actively utilizes various channels, such as irm.cninfo.com.cn, investor hotline, and corporate email, to handle investor inquiries, strengthen investor understanding and recognition of the Company, and foster long-term, stable, and positive relationships with investors. For daily maintenance of investor relations, dedicated personnel are assigned to answer inquiries on the aforementioned platforms, ensuring timely and effective communication.

In 2024, the Company actively responded to investor questions on irm.cnin-fo.com.cn. Regarding results briefings, it hosted the 2023 online results briefing via www.quanjing.com, and participated in the "Energy Revolution, New Opportunities" collective results briefing organized by the Shenzhen Stock Exchange. For institutional engagement, following the release of periodic reports, the Company conducted extensive investor engagement events to provide deeper insights into its performance, development strategies, and operational status and convey its value proposition.

#### Information Disclosure

Following the requirements of the Company Law, the Securities Law, and the Administrative Measures for Information Disclosure of Listed Companies, Sineng Electric standardizes its information disclosure practices to ensure that material information is disclosed truthfully, accurately, promptly, fairly, and in full. All announcements are required to be concise, clear, and easy to understand, ensuring equal access to information for all shareholders. The Company also closely manages the registration of insiders with access to material information and enforces strict controls during trading windows and sensitive periods. These efforts enhance the timeliness, fairness, and completeness of disclosures and promote greater transparency in information disclosure.

In 2024, the Company issued a total of 112 announcements, covering periodic reports, resolutions of the Board of Directors and the Board of Supervisors, reelections, restricted stock vesting and circulation, share repurchase plans and progress, and updates on the use of raised funds.

### **Internal Control**

## Internal Control System Development

Sineng Electric began its company-wide internal control system construction in 2012. Since then, a comprehensive internal control system has been established. The Company effectively integrates internal control with management performance, linking assessment results with performance outcomes through scoring. This ensures the implementation of institutional constraints and effective supervision. For general internal control deficiencies identified in assessments, it requires relevant units to promptly develop corrective measures and set completion timelines to ensure effective rectification.

#### Internal Control Execution

Sineng Electric strictly follows the requirements of the China Securities Regulatory Commission and actively studies the latest policies and regulations. The management and use of raised funds are conducted in a secure and orderly manner. Oversight from senior management, internal audits, and financial supervision are employed to ensure stable and compliant operations. Guided by risk management and value creation, the Company continuously promotes internal control standards through training and communication, regulates the execution of internal control systems, strengthens internal control oversight, and optimizes the internal control environment, thereby enhancing the overall level of internal control management. By implementing proactive prevention, real-time control, and post-event supervision and feedback analysis, the Company effectively mitigates various risks and promotes healthy, efficient, and sustainable development.

In 2024, the Audit Department implemented the annual audit plan with focus on reviewing the implementation of internal control systems in key areas such as procurement and payment, sales and collection, inventory management, and fixed asset management, effectively mitigating potential risks.



# **Integrity Development**

#### **Integrity Systems and Standards**

Sineng Electric has established a comprehensive integrity system, including an anti-commercial bribery policy, a business ethics management policy, an employee handbook, and relevant laws, regulations, and codes of professional ethics. It has outlined codes of conduct that employees are expected to follow and set explicit disciplinary measures for violations.

### Internal Supervision and Whistle-blowing Mechanism

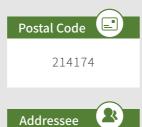
The Company has established an internal supervision and whistle-blowing mechanism, encouraging employees to actively report any violations of company regulations. Additionally, it conducts internal audits and self-assessments to ensure effective operation of the system.



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The Audit Department

### Risk Identification and Dynamic Assessment

The Company has established a sound internal supervision and risk assessment mechanism, conducting regular checks and evaluations on anti-corruption, anti-fraud, and anti-commercial bribery efforts to ensure the effective operation and continuous improvement of the system.

#### Internal Control and Compliance Management

The Company strictly adheres to relevant laws and regulations such as the *Company Law*, the *Securities Law*, and the *Basic Standard for Enterprise Internal Control*, continuously improving its internal control system to ensure the stability and compliance of its operations.

#### **Strengthening Employee Integrity Awareness**

The Company strengthens employee integrity education through integrity lectures, anti-corruption training, and other initiatives. It encourages employees to maintain self-discipline and integrity, actively safeguard the Company's interests and foster a positive culture of anti-corruption and integrity while adhering to basic codes of conduct.

# **Information Security and Privacy Protection**

# **Information Security Policy**

Enhance awareness of information security, comprehensively control various risks, actively prevent them, and continuously improve security measures.

# Construction of the Information Security Management System

To enhance its information security management level, ensure the smooth advancement of business activities. and prevent potential losses to the Company and its customers due to information security incidents (such as system disruptions, data loss, and leakage of sensitive information), Sineng Electric thoroughly implements the international standard Information Security, Cybersecurity, and Privacy Protection - Information Security Management Systems - Requirements (ISO/IEC 27001:2022), and has successfully passed the ISO 27001 Information Security Management System certification. Additionally, it has developed the Information Security Management Manual, which serves as the guiding framework and action criteria for establishing and implementing the information security management system. This manual guides the implementation of information security management policies and objectives, ensuring the effective operation and continuous improvement of the system.



The company has obtained ISO 27001 Information Security Management System certification.

## Establishment of Policies and Regulations

Sineng Electric has established a series of information security management policies to ensure the standardization and normalization of its information security efforts. Key policy documents include:

**Computer Hardware Management Regulations:** Standardize the procurement, use, and maintenance processes for computer hardware.

**Sensitive Computer Management Regulations**: Strengthen the management and use of sensitive computers to prevent information leakage.

**Network and Information Security Emergency Response System**: Establish an emergency response mechanism for information security incidents to ensure a rapid response and handling of security incidents.

**Data Center Management Regulations**: Standardize daily management and operations in data centers to ensure the safe operation of core equipment.

*Information Security Management System*: Define the overall requirements and management processes for information security work.

**4**49 ▶

#### Protective Measures

Sineng Electric has adopted a range of advanced technical measures to build a robust information security defense line:

# Network isolation and firewall technologies

Firewalls are deployed between functional network segments to filter traffic and prevent unauthorized access, ensuring a secure network environment.

# Data encryption and security protocols

Core departments use encryption technologies to record important files and operational activities, ensuring the security of data transmission. Communication between branches and subsidiaries is secured using protocols such as SSL/TLS, ensuring data integrity and confidentiality.

# Intrusion Detection System and Intrusion Prevention System (IDS/IPS)

IDS/IPS are implemented to monitor network activities in real time, enabling prompt detection and blocking of potential intrusions.

# Antivirus and malware protection

Antivirus software is installed to monitor system activities in real time, defend against viruses and malware, and prevent data encryption or ransomware attacks, thereby reducing overall security risks.

#### Vulnerability Management and Risk Assessment

Sineng Electric regularly conducts vulnerability scans on its enterprise resource planning (ERP) system, manufacturing execution system (MES), and industrial control systems. By identifying software vulnerabilities, the Company can promptly apply patches provided by software vendors to mitigate potential risks. For example, if a vulnerability that could disrupt production is detected in the MES system, the IT team will swiftly install the necessary patches.

### Compliance and Data Privacy Protection

As it expands business overseas, Sineng Electric is committed to compliance with data privacy laws and regulations, and adheres to relevant foreign regulations:

#### General Data Protection Regulation (GDPR) in Europe:

The Company strictly follows the GDPR requirements in the European market, ensuring transparency in its data processing practices.

#### California Consumer Privacy Act (CCPA) in the United States:

In the U.S. market, the Company actively complies with the CCPA regulations, and standardizes its data privacy management.



#### Employee Training and Awareness Enhancement

Employees are a key component in information security and data privacy protection. Sineng Electric regularly conducts information security training, covering the following topics: prevention of email fraud, the importance of protecting supply chain data, proper handling of sensitive information, and legal consequences of data privacy violations. Through case studies and interactive training, the Company continuously enhances employees' security awareness and response capabilities.

# People First, Harmony and **Shared Success**

This section provides a comprehensive overview of Sineng Electric's proactive efforts in safeguarding employees' rights and interests, managing human resources, promoting employee training and career development, enhancing employee well-being, and engaging in public welfare initiatives. The Company consistently places employees at the center of its operations, offering an equal and fair working environment and ensuring the protection of their rights and interests. A well-established system for employee training and career development is in place, with tailored programs designed to meet the diverse development needs of different employee groups. Meanwhile, by organizing a variety of engaging activities and offering a competitive compensation and benefits package, the Company fosters a strong sense of belonging and well-being among employees. In the realm of public welfare, Sineng Electric actively participates in community initiatives, supporting education, poverty alleviation, and other causes, thereby contributing to the harmony of society.

- Protection of Employees' Rights and Interests
- Human Resources Management
- Employee Training and Career Development
- Employee Care
- Public Welfare
- Commitment to Local Development





# Protection of Employees' Rights and Interests

# **Labor Management**

Sineng Electric strictly complies with national and local laws and regulations, as well as mandatory standards set by the International Labour Organization and United Nations conventions. The Company respects employee freedom and prohibits all forms of forced labor. It provides employees with safe and hygienic working and living conditions, evaluates health and safety risks in the workplace, identifies risk priorities, and implements targeted control measures to strengthen risk management.

Sineng Electric prohibits the use of child labor and underage workers, and does not accept any suppliers or subcontractors that support the use of child labor. It respects employees' freedom of association and their rights to collective bargaining, and supports employees to participate in trade unions and elect employee representatives. Sineng Electric is committed to providing an equal and fair working environment, strictly prohibiting any form of discrimination. The Company also respects fundamental human rights of employees, and forbids any form of harassment, abuse, or corporal punishment. Production schedules are arranged reasonably to ensure work-rest balance. Additionally, regular training is provided to employees on health, safety, social responsibility, and business ethics, promoting continuous growth and improvement for both employees and the Company.



# **Employee Health and Safety Management**

Sineng Electric strictly complies with applicable national laws and regulations and has adopted a range of effective measures to protect employee occupational health. Through solid efforts, it has successfully obtained ISO 45001 Occupational Health and Safety Management System certification.

Sineng Electric has successfully obtained ISO 45001 Occupational Health and Safety Management System certification.



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#### Institutional Framework

The Company has established a dedicated EHS (Environment, Health, and Safety) department responsible for occupational health management, staffed with qualified professionals. A comprehensive set of occupational health management policies and operating procedures has been put in place, such as the Occupational Disease Prevention Responsibility System and the Occupational Hazard Project Declaration System, which clarify responsibilities of each position and standardize workflows in occupational disease prevention, ensuring occupational health through a robust institutional framework.

# • Identification and Management of Occupational Disease Hazards

Sineng Electric engages a qualified institution to conduct testing for occupational disease hazards in the workplace every year, and performs an occupational hazard status assessment every three years. The testing and assessment results show that the Company has comprehensively identified potential occupational disease hazards. Additionally, it has set up warning signs at worksites (e.g., "Dust mask required" ) to remind employees of taking proper precautions, thereby effectively reducing health risks.





#### Occupational Health Examinations

Sineng Electric organizes annual occupational health examinations for employees exposed to occupational hazards, conducted at qualified medical institutions, and the results are promptly communicated to employees. According to the examination outcomes, no occupational contraindications or suspected occupational diseases have been identified.

#### • Training and Emergency Response

Sineng Electric regularly conducts occupational health and safety training to ensure employees are well-versed in occupational health knowledge, understand the toxic and harmful substances they may encounter at work, and comply with relevant laws, regulations, and operating procedures. Key personnel and safety managers are required to undergo training and obtain the necessary certification. Additionally, the Company organizes emergency drills to enhance the ability to respond to sudden occupational health incidents. Furthermore, two AEDs (Automated External Defibrillators), along with first aid kits and related medications, are placed in easily accessible areas to further ensure the health and safety of employees.

**People First, Harmony** 

# **Safety Production Management**

#### Safety production responsibility system



Sineng Electric adheres to national and local safety production laws and regulations, strengthening employees' safety awareness and legal consciousness.

The safety production responsibility system is implemented, with clear safety production targets set and responsible individuals at each level signing the Safety Production Goal Responsibility Agreement.

Regular safety production meetings are held to summarize safety production work, formulate hazard rectification and prevention measures, communicate safety documents, and report on inspection results.

#### Safety production management



The Company has established and maintained equipment and safety facilities records, and conducts regular inspections and maintenance to ensure proper and complete documentation.

Warning signs are posted at positions exposed to occupational hazards, and hazardous chemicals are stored properly with clear classification labels

Comprehensive and effective fire safety equipment is provided, and operators wear personal protective equipment as required.

#### Safety emergency response



The Company formulates safety precaution measures and emergency response plans, conducts regular drills, and continuously improves the operational effectiveness of its response plans.

#### Safety awareness promotion



The Company organizes safety knowledge training to ensure employees acquire essential safety techniques and self-protection knowledge. Employees are only allowed to start work after passing the required assessments. Comprehensive records of safety training are maintained.

For employees reassigned to new roles, transferred to different positions, or resuming work, the Company provides training on safety skills and job-specific operations. Employees in special operations receive training and certification as required by

Employees are trained to properly handle workplace injuries, correctly use personal protective equipment, and perform self-rescue and mutual aid.

Warning signs, slogans, and similar means are used to clearly communicate job-related hazards and preventive measures.





### Hierarchical Risk Control and Hazard Investigation and Rectification

Value-Driven, Long-Term

To enhance its ability to prevent safety risks and effectively reduce and contain various types of workplace accidents, Sineng Electric carries out hierarchical risk control and hazard investigation and rectification initiatives. It has established a comprehensive system for hazard identification and risk control, ensuring that hazard identification is largely in place and control measures are gradually implemented.



Mobilization, planning, and training phase

**Building a Greener** 

**Future Together** 

- Establish a leading group for the hierarchical risk control and hazard investigation and rectification systems
- Develop the dual-system implementation plan
- Company-wide training (department heads and workshop employees)



Hierarchical risk control implementation phase

- Develop system operation guidelines
- Identify risk points and hazards
- Conduct risk assessments
- Formulate control measures
- Complete the identification and statistics of operational activities, facilities, and equipment
- Generate a list of risk points and hazards
- Investigate existing control measures



Hazard identification and rectification implementation phase

- Determine the level of hierarchical risk control
- Prepare a hazard identification checklist
- Implement hazard identification
- Implement hazard rectification according to the hazard management process



System consolidation and supportive measures phase

- Conduct training on the application of work instructions, risk points, and checklists
- Create standardized display boards: "Four-color" safety risk spatial distribution maps (at the plant and workshop levels), bulletin boards (including risk points and control measures), and notification cards for positions with higher risks

# **Human Resources Management**

# **Employee Recruitmen**



#### Recruitment principles

Upholding the principles of fairness, impartiality, and transparency, Sineng Electric conducts recruitment activities in an orderly and standardized manner in accordance with the Recruitment Management Policy and the Labor Contract Management Measures. When selecting talents, the Company places emphasis on candidates' capabilities, skills, and adaptability, aiming to evaluate and recruit the most suitable individuals. It firmly opposes employment discrimination and earnestly safeguards employees' rights and interests.

#### **Recruitment process**

Sineng Electric has established and continuously improved its recruitment and employment management process. From identifying recruitment needs, publishing job information, screening résumés, and conducting interviews to final hiring decisions, each step is carefully designed and strictly controlled to ensure an efficient and standardized recruitment process. The Company respects employees' right to freely choose their employment, undertakes to provide objective and accurate job information, and supports employees in pursuing their individual career goals and development. There have been no incidents of illegal employment, and the labor contract signing rate has reached 100%.

#### **Recruitment channels**

Sineng Electric primarily recruits talents through campus recruitment and social recruitment. In terms of campus recruitment, the Company engages in diverse collaborations with universities, such as the "Sineng Electric Classroom" and co-established laboratories, to provide students with scenario-based case studies rooted in the Company's experience and expertise in the field of power electronics, helping them better understand the application scenarios of power electronics products in a more vivid and intuitive way. During the recruitment season, Sineng Electric maintains close interaction with universities. In 2024, students from Xi' an Jiaotong University were invited to visit the Company. At the same time, Sineng Electric organized technical experts to deliver themed lectures at institutions including Jiangnan University and Xi' an Jiaotong University. These lectures covered topics such as career guidance and industry insights, aiming to help students integrate theoretical knowledge with practical experience, broaden their horizons, and gain a deeper understanding of how various technologies are applied across the industry.

## **Employee Communication**

To foster a diverse, equitable, and inclusive workplace environment, Sineng Electric has established multiple online and offline communication channels to ensure effective communication with employees. Employees can voice concerns or provide feedback on work-related issues through email or telephone, or share different perspectives via suggestion boxes or face-to-face meetings.

#### **Employee communication activities**

In 2024, in addition to traditional employee forums, Sineng Electric held several CEO luncheons, inviting employees from various departments to share their thoughts on the Company's development and express any concerns in a relaxed setting. These initiatives aimed to listen to employees' voices and needs, provide timely feedback and response, and ensure that employee concerns are addressed promptly. They also provided opportunities for staff from different functional departments to learn about the thoughts of colleagues from other departments, thereby breaking down "departmental silos" and improving communication efficiency within the organization. Dedicated personnel were assigned to follow up on employee feedback issues, ensuring timely communication of the progress to employees.



# Employee Training and Career Development

# **Talent Development**

Sineng Electric places great emphasis on talent cultivation and development. In 2024, the Company conducted a comprehensive review of job descriptions and career paths across all business segments, establishing clear and structured career development pathways for different categories of employees. For R&D personnel in particular, a dual-track career path was defined, allowing them to advance either along a technical track or toward management roles. The updated job descriptions laid the foundation for building and refining training systems tailored to employees of different levels and categories. The Company also formulated differentiated training and development plans to meet the career growth needs of diverse employee groups.

### Employee Training

The Company offers a wide range of learning resources through classroom training, specialized learning programs, and hands-on practice, aiming to cultivate leadership skills among managers and enhance the professional and technical capabilities of employees, thereby strengthening overall organizational competence.









Sineng Electric provides employees with opportunities to systematically acquire theoretical knowledge through training courses that cover electrical engineering fundamentals, power electronics, and energy storage systems, addressing the knowledge needs of employees in different positions.

To meet the requirements of specific positions or skill sets, the Company organizes specialized learning programs. For instance, R&D personnel are provided with specialized training on the latest energy storage technologies and PV inverter technologies to enhance their technical expertise.

Valuing the development of practical skills, the Company offers case-based training to help employees grasp skills in real-world operations. The training sessions feature demonstrations and hands-on practice with actual electrical equipment, improving employees' operational capabilities and problem-solving skills.

### **Talent Development**

#### New graduates

Sineng Electric assigns dedicated mentors to new graduates, offering support across multiple areas such as role transition, professional skills, and career guidance. This helps them quickly adapt to the workplace, enhance their expertise, and clarify their career development paths.

#### Mid- and senior-level managers

For mid- and senior-level managers, the Company offers training in strategic planning, project management, and lean management to enhance their strategic thinking and management capabilities to better drive the Company's development.

# R&D, sales, and procurement personnel

The Company offers tailored training courses—such as business negotiation skills and key account marketing—for employees in R&D, sales, and procurement roles, aiming to enhance their role-specific competencies.

Sineng Electric has established a comprehensive training evaluation mechanism, using methods such as questionnaire surveys, on-site assessments, and performance evaluations to assess the effectiveness of training programs. These evaluations help gauge employees' understanding of the training content, their satisfaction with the training methods, and improvements in job performance following the training. Based on the results, the Company provides timely feedback and makes necessary adjustments, such as optimizing course content, improving training methods, and adjusting training plans, to enhance training quality and effectiveness and better address the development needs of its employees and the Company itself. In 2024, Sineng Energy organized 287 training sessions, covering over 7,000 participants.

Number of training sessions

287

Number of participants

6500<sup>+</sup>

# **Employee Care**

# **Employee Compensation and Benefits**

Sineng Electric is committed to attracting and retaining talent by establishing a fair and competitive compensation system and incentive mechanisms that motivate both the organization and its employees.



#### **Compensation System**

#### Comprehensive compensation structure

The Company has developed and continuously improved a compensation system that includes salaries, subsidies, bonuses, long-term incentives, and statutory benefits, offering employees a diversified package of compensation and benefits.

#### Compensation management mechanism

Sineng Electric has put in place a robust compensation management system, such as policies on employee salary and bonus management, to ensure fairness and rationality in compensation distribution.

#### Job grading and performance evaluation

Through a structured job grading and performance evaluation system, Sineng Electric provides clear direction for employee development and contribution. Based on individual contributions and evaluation results, it offers competitive compensation and benefits to inspire employee motivation and creativity.

#### Compensation strategy

Based on business characteristics, talent strategy, and talent supply status in the market, Sineng Electric adopts a partially leading compensation strategy, offering highly competitive salaries for key positions to attract and retain top talent. Each year, the Company reviews and adjusts job grades and salaries based on employee performance and external pay benchmarking.

#### **Equity incentive**

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Sineng Electric continuously launches equity incentive plans, establishing a mechanism for employees to share in the Company's interests. This helps to inspire the management team, exceptional employees, and key talents, while enhancing their sense of belonging and accountability.

#### **Talent subsidies**

The Company actively assists employees in applying for various talent subsidies available in their respective regions, such as housing subsidies, home purchase subsidies, and individual income tax subsidies, providing additional financial assistance to ease their living burdens and enhance the Company's appeal to talent.



# **Employee Satisfaction**

Sineng Electric places great importance on employee satisfaction. Each quarter, the Company conducts online surveys to gather employee feedback on issues and suggestions related to key aspects that affect their well-being and work experience, including food, housing, transportation, expense reimbursements, and IT system support. Feedback is promptly forwarded to relevant departments, with support provided in identifying root causes, developing solutions, and following up on implementation to continuously enhance employee satisfaction.

In 2024, employee concerns were primarily focused on cafeteria dining, parking space availability, and IT response. The Company took the feedback seriously. To address cafeteria concerns, it introduced a wider variety of dining options. In response to parking space shortages, it actively explored nearby resources and opened new parking areas to ease parking stress.

To address the challenge of delayed feedback from front-line manufacturing staff due to their large numbers, the manufacturing department regularly organized random discussions with front-line employee representatives to collect their feedback, compiled and published the feedback issues, and communicated improvement measures and opinions back to employees, thereby improving satisfaction and sense of belonging among front-line staff.

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# **Employee Activities**



## June: Youth Vitality Culture Festival









## July: Sineng Electric New Employee Growth Training Camp







## September: Mid-Autumn Parent-Child DIY Workshop





# **Public Welfare & Charity**

Sineng Electric actively participates in social welfare initiatives, with a focus on education, poverty alleviation, and social assistance. The Company's donations over the past three years are as follows:

2022

**SINENG** 

One-Day Charity Donation (poverty relief, education, elderly care, healthcare, and disability support) – Huishan District Charity Federation

Donation for the construction of the Chamber of Commerce Office Building in Huishan Economic and Technological Development Zone– Huishan Economic and Technological Development Zone Chamber of Commerce

East–West Collaboration for Rural Revitalization in Ping'an District, Haidong – Huishan Economic and Technological Development Zone Chamber of Commerce

2023

One-Day Charity Donation – Huishan District Charity Federation

2024

Special Fund for Educational Development – Experimental School of Jiangsu Xishan Senior High School





Sineng Electric has established an internal charitable assistance system, including support for employees in need, employee social security, and employee counseling room. These initiatives are designed to provide care and support for employees facing personal or financial difficulties.

# **Commitment to Local Development**



**SINENG** 

Case: Sineng Electric Facilitated the Successful Grid Connection of the 641 MW Adani Khavda Solar Power Plant in India

The 641 MW Adani Khavda solar power plant is part of the 30 GW Khavda Solar Park in India. Upon completion, the project is expected to address the daily electricity needs of approximately 11.6 million Indian households, playing a significant role in the region's energy transition and sustainable green development.



The project is equipped with a total of 2,887 Sineng 275 kW string inverters, enabling an estimated annual power generation of 1,900 GWh. Sineng Electric exercised strict control over the construction process, and uniformly set the pile foundation depth at 3 meters to ensure structural safety and stability. With extensive project experience and outstanding resource coordination capabilities, it successfully overcame challenges in workforce management, daily living supplies, transportation and accommodation, and digital infrastructure setup.

Now officially connected to the grid, the project is expected to reduce local carbon emissions by 910,000 tons per year, equivalent to planting 4.56 million trees, while creating substantial employment opportunities, injecting strong momentum into the local economy.



275kW string inverters

2,887

\_ \_ \_ \_

Annual power generation

**1,900** GWh

Equivalent to planting

Annual carbon emissions reduction

4.56 million trees

**910,000** tons



#### Case: Sineng Electric Facilitated Successful Grid Connection of 140MW PV Project in Albania

As a landmark PV project in the Balkan region of Southern Europe, the Karavasta Solar project is expected to generate 265 million kWh of electricity annually, sufficient to meet the yearly electricity needs of 220,000 local residents. Sineng Electric supplied 6.25MW central inverters for the project, significantly boosting the use of green and clean energy in Albania and accelerating local green energy transition. During the project's construction and operation, Sineng Electric created employment opportunities for Albania's clean energy sector, promoting the development of local renewable energy industry and supporting Albania's green and low-carbon development.





In the global pursuit of carbon neutrality, Sineng Electric, as a leader in the PV industry, is committed to providing high-quality solutions, ensuring the success of every project, meeting the evolving expectations of global customers, and shaping a premium and trustworthy brand image. Moving forward, the Company will continue to leverage its technological edge in inverter solutions to drive the green energy transition and contribute new momentum to the global zero-carbon vision.

# **Appendix**

**Key ESG Performance in 2024** 

**Business Performance** 

**Economic Performance** 

Total revenue

Total assets

Net profit attributable to shareholders of the listed company

RMB 4.773 billion

RMB **8.1** billion

RMB 419 million

board meetings held

Number of

Number of supervisory board meetings held

Number of resolutions reviewed at board meetings

Number of resolutions reviewed at supervisory board meetings

# **Corporate Governance Performance**

**Corporate Governance Performance** 

Number of general meetings of shareholders held

Number of resolutions reviewed at general meetings of shareholders

### **Business Ethics Performance**

Percentage of employees who signed the integrity pledge

100%

Number of employees participating in anti-corruption training

Number of anti-corruption training sessions conducted

Confirmed incidents of corruption

competition and violations of anti-monopoly regulations

Incidents related to unfair

#### **R&D** and Innovation Performance

R&D investment

RMB 290 million

Number of R&D personnel

490

#### **Intellectual Property Performance**

Number of patent applications during the reporting period

131

Number of granted invention patents

6

R&D investment as a percentage of total revenue

6.07%

Proportion of R&D personnel

30.45%

Number of granted patents during the reporting period

32

Number of granted utility model patents

22

Number of granted design patents

4

#### **Information Security Performance**

Complaints related to custome privacy violations

0

Confirmed incidents of customer data leakage, theft, or loss

#### **Environmental Performance**

**Carbon Emissions Performance** 

Classified by emission scope:

Scope 1

283.62 tCO<sub>2</sub>e

Scope 2

11,079.51 tCO<sub>2</sub>e

Scope 3

**2,142,853.88** tCO<sub>2</sub>e

Total

**2,154,217.01** tCO<sub>2</sub>e

#### **Environmental Management Performance**

Number of incidents with severe risks and environmental impact, such as fire

0

#### **Energy Management Performance**

Purchased electricity for production operations

20,647,614 kWh

Self-generated electricity from rooftop photovoltaics for production operations

66,175 kWh

#### **Water Resource Management Performance**

Total water withdrawal for the year

**73,600** tons

#### **Waste Management Performance**

Compliance rate for hazardous waste disposal

100%

Compliance of waste emissions

Yes

#### **Social Performance**

#### **Employment Performance**

Total number of employees at the parent company

893

Production personnel

414

Sales personnel

417

Employees with a master's degree or above

257

Number of employees at major subsidiaries

716

R&D personnel

490

Administrative personnel

243

Employees with a bachelor's degree

658

es Total number s of employees

1,609

Financial personnel

45

Total

1,609

Employees with education below bachelor's degree

694

Total

1,609

#### **Employee Rights and Interests Performance**

Labor contract signing rate

100%

Social insurance coverage rate

100%

#### **Employee Training Performance**

Total number of employees receiving training

6,500

Average hours of safety training per person

30

Total training hours for employees

5,278

Average hours of training for new employees

16

Average training hours per employee

2.3

New employee training coverage rate

100%

#### Parental Leave Performance

Employees who took parental leave during the reporting period

183

Return-to-work rate

99%

Employees who returned to work after leave during the reporting period

182

Total number of returned employees still employed at the end of the reporting period

182

#### Occupational Health and Safety Performance

Number of work-related fatalities (direct employees)

Number of work-related injuries (direct employees)

Occupational disease incidence rate

Pre-employment health examination coverage

100%

On-the-job health examination coverage

100%

Number of major safety and environmental pollution incidents

Post-employment health examination coverage

100%

Number of safety drills conducted

#### **Supplier Management Performance**

Total number of suppliers

during the reporting period

Number of domestic suppliers

New suppliers added

26

Proportion of domestic suppliers

100%

Suppliers eliminated during the reporting period

36

Number of overseas suppliers

Proportion of overseas suppliers

# Report Indicator Index

Index Table for the Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (For Trial Implementation)

#### Environmental

No.	Topic	Article	Corresponding Section in This Report
1	Response to climate change	Articles 21-28	Building a Greener Future Together
2	Pollutant discharge	Article 30	Building a Greener Future Together
3	Waste disposal	Article 31	Building a Greener Future Together
4	Ecosystem and biodiversity protection	Article 32	During the reporting period, the Company's operating sites were not located in protected areas, and its business activities did not have any significant negative impact on ecosystems or biodiversity.
5	Environmental compliance management	Article 33	Building a Greener Future Together
6	Energy utilization	Article 35	Building a Greener Future Together
7	Water resources utilization	Article 36	Building a Greener Future Together
8	Circular economy	Article 37	Building a Greener Future Together

#### Social

No.	Topic	Article	Corresponding Section in This Report
9	Rural revitalization	Article 39	People First, Harmony and Shared Success
10	Social contributions	Article 40	People First, Harmony and Shared Success
11	Innovation-driven	Article 42	Empowerment through Technology and Innovation

12	Ethics of science and technology	Article 43	During the reporting period, the Company's business did not involve scientific and technological fields such as genetics or AI ethics, nor did its production and operations involve any activities related to ethics of science and technology.
13	Supply chain security	Article 45	Value-Driven, Long-Term Commitment
14	Equal treatment of SMEs	Article 46	During the reporting period, the Company had no outstanding payments overdue to small and medium-sized enterprises. As of the end of the reporting period, there were no accounts payable (including notes payable) exceeding RMB 30 billion or accounting for more than 50% of total assets.
15	Product and service safety and quality	Article 47	Value-Driven, Long-Term Commitment
16	Data security and customer privacy	Article 48	Compliance and Integrity as the Foundation
17	Employees	Article 50	People First, Harmony and Shared Success

#### Governance

No.	Topic	Article	Corresponding Section in This Report
18	Due diligence	Article 53	Sustainable Development Management
19	Communication with stakeholders	Article 53	Sustainable Development Management
20	Anti-commercial bribery and anti-corruption	Article 55	Compliance and Integrity as the Foundation
21	Anti-unfair competition	Article 56	Compliance and Integrity as the Foundation

