


# Responding to Climate Change


Luxshare Precision follows the *Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), Guideline* and other disclosure requirements, proactively assesses climate-related risks and opportunities in various aspects of upstream and downstream operations as well as its own operations from four aspects of "Governance", "Strategy", "Risk Management" and "Metrics and Targets". For details, please refer to the *Climate Risk and Opportunity Identification and Response Strategy*.



**Governance**

- Establishing a climate change management framework led and decided by the Board of Directors, reviewed by the Strategy Committee, coordinated and managed by the Sustainable Development Center, and implemented by each factory. Conduct at least one annual discussion on climate change related issues to develop plans and track the achievement of climate goals
- Establishing an incentive mechanism linking emission performance to the remuneration of senior management, incorporating the achievement of science-based target into considerations, motivating the Company's management to integrate emission reduction into operational decisions


---



**Strategy**

- Identifying potential climate risks and opportunities in its own operations and value chain, evaluate the importance of various climate issues in the current and future macro environment in conjunction with relevant international and domestic policies, and estimate development trends
- Utilizing the Net Zero Emissions (NZE 2050) scenario set by the International Energy Agency (IEA) and the Representative Concentration Pathway (RCP8.5) scenario set by the Intergovernmental Panel on Climate Change (IPCC) to evaluate the impact of climate change risks and opportunities on the Company's business, strategy, and financial planning, proactively formulates climate response strategies, and enhances organizational climate resilience


---



**Risk Management**

- Current and potential climate risks have been integrated into the Company's overall risk management framework and implemented in the annual tasks of each risk management department
- The Sustainable Development Center regularly holds special meetings to discuss and analyze the environmental risks and opportunities reported by various risk management departments, formulate risk countermeasures, and submit them to the Strategy Committee under the Board of Directors for final review

---



**Metrics and Targets**

- Establishing science-based targets in line with the 1.5°C pathway, which have been formally validated and approved by the Science Based Targets initiative (SBTi)
- Setting phased climate targets and committing to achieving carbon neutrality no later than 2050



## Continuous Low-Carbon Operations

Luxshare Precision has issued the *Luxshare Precision Carbon Management Commitment and Statement* and has established a series of policies and procedures such as the *Greenhouse Gas Operation Guidelines* and the *Operation Procedure of Greenhouse Gas Control* to implement the path of low-carbon development through actions. We conducted comprehensive carbon accounting and set carbon reduction targets that align with our own development. At the same time, we continuously optimize our carbon management platform, actively participate in the formulation of greenhouse gas-related standards and promote steady progress in carbon reduction efforts.

### Carbon Management



<sup>15</sup> The timeframe is from 2023 to 2025.

## Carbon Emission Targets and Action Roadmap

In alignment with the world's ambitious goal of limiting global temperature increase to 1.5°C above pre-industrial levels, Luxshare Precision has taken a leading role in corporate climate action. By systematically analyzing business operations and integrating projected business growth with SBTi reduction pathways, the Company has set science-based emission targets spanning both its operations and core value chain. Luxshare Precision has issued a *Carbon Emission Reduction Roadmap (short-term, medium-term, long-term)* and *Carbon Emission Reduction Strategy*. Through scientifically quantified emission reduction targets and a clear action plan, the Company is steadily delivering on its climate commitments.

# Scientific Accounting of Carbon Emissions

Each year, we conduct a comprehensive inventory of Scope 1, 2, and 3 greenhouse gas emissions in accordance with ISO 14064-1 guidelines, followed by third-party verification. This process ensures precise annual greenhouse gas emission quantification and clarifies our energy consumption structure, laying a solid foundation for effective carbon management. During the Reporting Period, subsidiaries covered by carbon emission trading schemes fully complied with national and regional regulations. We proactively completed emissions data reporting, allowance trading and quota settlements, supporting the development and stable operation of carbon markets.

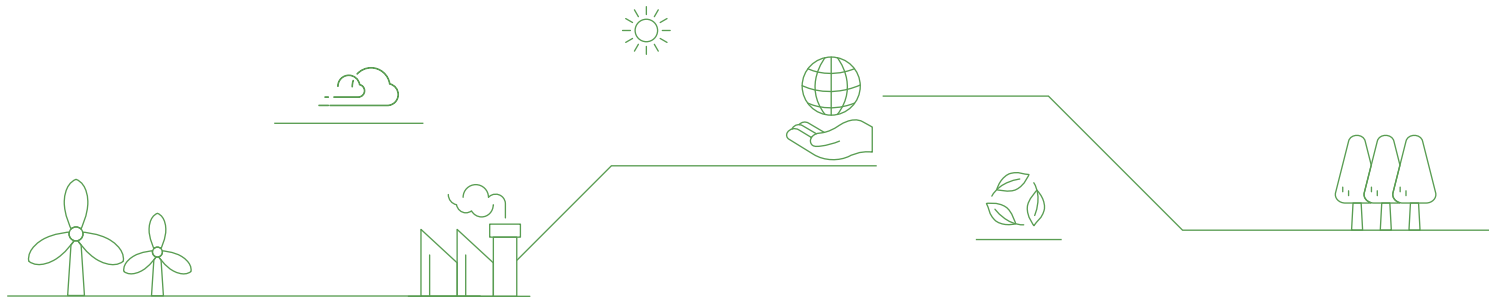
Additionally, our subsidiary Shanghai Ri Ming actively pursued zero-carbon factory certification by implementing multiple emission reduction measures. Through Verified Carbon Standard (VCS) retirement, it successfully offset approximately 315 tCO<sub>2</sub>e, **successfully achieved carbon neutrality and was honored as a Shanghai 2024 Zero-Carbon Pioneer Enterprise.**

In 2024, Luxshare Precision introduced an internal carbon pricing mechanism to estimate the cost of carbon emissions using a shadow price in conjunction with historical and future carbon price expectations, making full use of economic instruments to stimulate new momentum for internal low-carbon transformation.



<sup>14</sup> Figures in 2024 have not been verified.

<sup>15</sup> Changes in company boundaries due to business activities such as mergers and acquisitions.



The Company has carried out extensive and in-depth discussions with various industry associations and groups on the topic of carbon emissions and applied its own experience in building a standardized carbon management system to the formulation of external standards. During the Reporting Period, Luxshare Precision participated in the preparation of group standards led by the China Academy of Environmental Sciences and issued by the China Society for the Study and Promotion of Ecological Civilization, which helped small and medium-sized enterprises efficiently carry out greenhouse gas accounting and disclosure work.

In the journey of ed  
stathdog o up bon em og ow th supnh  
ac tme pthe hd P d n w

## Optimizing Energy Use

Luxshare Precision adheres to the energy management principle of *Compliance, Clean Production*, formulates energy management strategies, adheres to energy-saving and low-carbon production, carries out high-efficiency energy management, and actively explores the use of clean energy.

## Energy Management

The Company has formulated internal policies such as the to continuously promote the construction of an energy management system. Using our years of experience in energy management, we organically combine energy management with intelligent park management, build and continuously optimize the construction of the Intelligent Energy Management (IOE) platform, which effectively reduces the comprehensive energy consumption of each factory while optimizing the allocation of resources and improving the efficiency of energy utilization.

### IOE Platform Functionality

Realistic scenarios using digital twin technology

Realize one-screen overview and one-key control of equipment information

Real-time alarm linkage shortens work order response time

Realize real-time monitoring and intelligent analysis

Record detailed data log, making data traceable

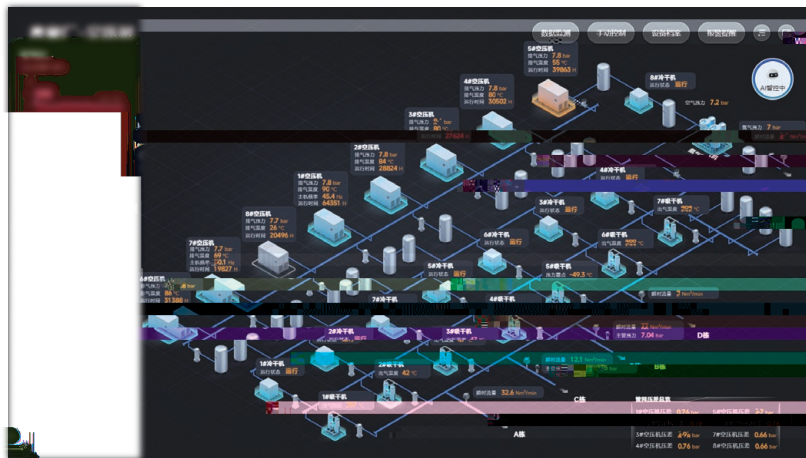
Dynamic management and real time monitor of warehouse information

Efficiently protect the safety of personnel and electromechanical equipment

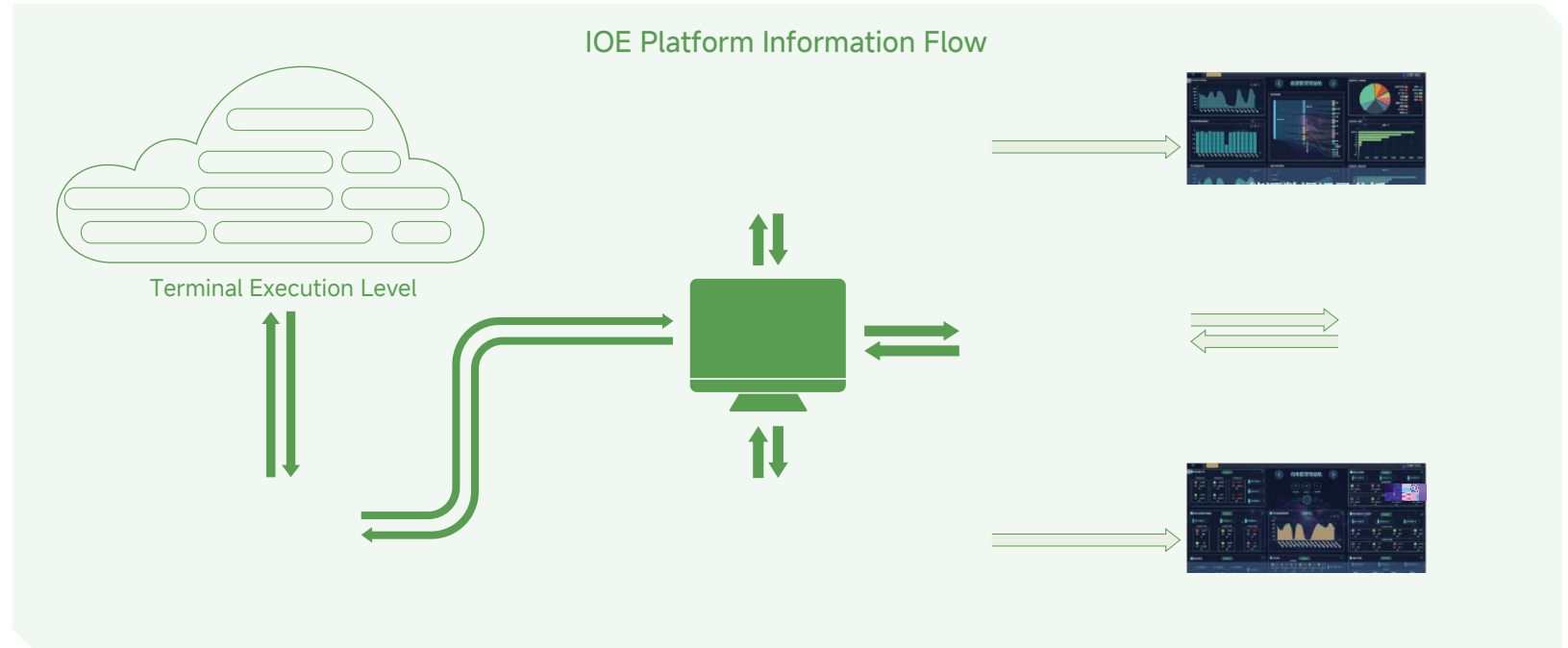
Optimize group control algorithm to improve operational efficiency

### Case | Dongguan Xuntao Applied IOE Platform to Efficiently Manage Energy Usage

Dongguan Xuntao introduced the IOE intelligent energy management platform to monitor the operation of the power distribution, water supply, air compressor, and waste heat recovery system and applied the cloud intelligent control system to the digitalization and automation management of the air compressor station. This system has the functions of intelligent monitoring of energy consumption, automatic control of equipment operation, etc. Through the intelligent control of the air pressure station house, it improves the loading rate of the equipment, enhances the stability and quality of the gas supply, improves the efficiency of the equipment operation and the effect of stabilizing the pressure, and reduces the power consumption by 12%.



Cloud Intelligent Control System for Air Compression Station Room



## Energy Efficiency Improvement

By focusing on facility upgrading and transformation, process optimization, and other fields, Luxshare Precision has constructed an all-round energy efficiency improvement system to achieve double benefits of operation cost reduction and green environmental protection.

### Summary of Energy Efficiency Retrofit Projects in 2024

Number of Projects	Air Compressor System	Central Air Conditioning	Exhaust Fan in Factories	Life and Office Power Consumption	Production Power Consumption	Total
	55	53	10	49	182	
	Annual Power Conservation (MWh)					
Annual Greenhouse Gas Emission Reduction (tCO <sub>2</sub> e)	Air Compressor System	Central Air Conditioning	Exhaust Fan in Factories	Life and Office Power Consumption	Production Power Consumption	Production Power

### Case | Luxshare Smart Manufacturing Carried Out a Number of Equipment Renovation Work to Help Energy Saving and Carbon Reduction

Through a series of equipment upgrading and renovation projects, Luxshare Smart Manufacturing has significantly improved the production energy efficiency and reduced energy loss, with an annual energy saving of 1,532MWh and an annual carbon emission reduction of 954 tCO<sub>2</sub>e.

#### Adsorption dryer renovation

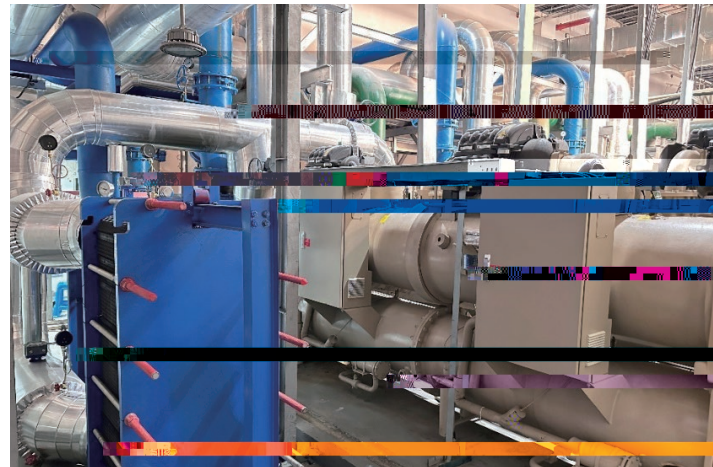
We have implemented zero gas loss transformation on the existing suction dryer and upgraded it to a blower type model, avoiding the loss of finished gas during the cold/hot regeneration stage of the micro heat regeneration adsorption dryer and achieving energy conservation and consumption reduction.



Zero Air Loss Blower Type Suction Dryer

#### Air-conditioning plate heat exchanger renovation

A plate heat exchanger is added to utilize the low-temperature environment to realize heat exchange between the cooling water tower and the heating, ventilation and air conditioning (HVAC) refrigeration system, enhance the indoor heat exhaust efficiency, and reduce the air-conditioning energy consumption.



Air Conditioning Plate Heat Exchanger Device

#### High-efficiency electromechanical water pump replacement

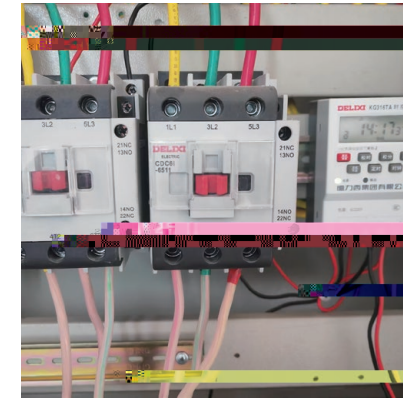
The magnetic levitation air-conditioning refrigeration/cooling pump motors were updated and iterated from Grade 3 energy efficiency (YE3) to Grade 1 energy efficiency (YE5), effectively reducing energy loss.

#### Central air-conditioning frequency conversion transformation

We installed a variable frequency drive, temperature sensors, and an automated control cabinet for the original 50Hz fixed-frequency air handling unit motor, and integrated an automated control system. Following the upgrade, the motor automatically adjusted its operating frequency based on real-time temperature variations in the zoned area, achieving optimized energy efficiency.

### Case | Luxshare Shanxi Added Automated Control System for Precise Power Consumption Control

In 2024, Luxshare Shanxi added an automatic temperature control system for the circulating water pump of the hot water system in the factory, replacing the manual control method in the past. By monitoring the water temperature in real time and presetting the temperature start/stop function, the water temperature is guaranteed, and at the same time, energy consumption and costs are improved in various aspects. After remodeling, Luxshare Shanxi Precision can save 76MWh of electricity annually.



Automatic Temperature Control System

### Case | Merry Huizhou Optimized Processes to Improve Energy Efficiency

Adopting the principle of "eliminate, merge, reorder, and simplify", Merry Huizhou explored the potential for optimization in the production workflow and optimizes the production process by eliminating and merging redundant processes, simplifying complex processes, and reasonably switching the order of processes. During the Reporting Period, Merry Huizhou successfully completed 31 special optimization projects, and the energy consumption per unit of product output has decreased by nearly 60% year-on-year.

As of the end of the Reporting Period, Luxshare Precision:



Number of subsidiaries certified by the ISO 50001

16

During the Reporting Period, Luxshare Precision:



Electricity saving rate<sup>16</sup> exceeded

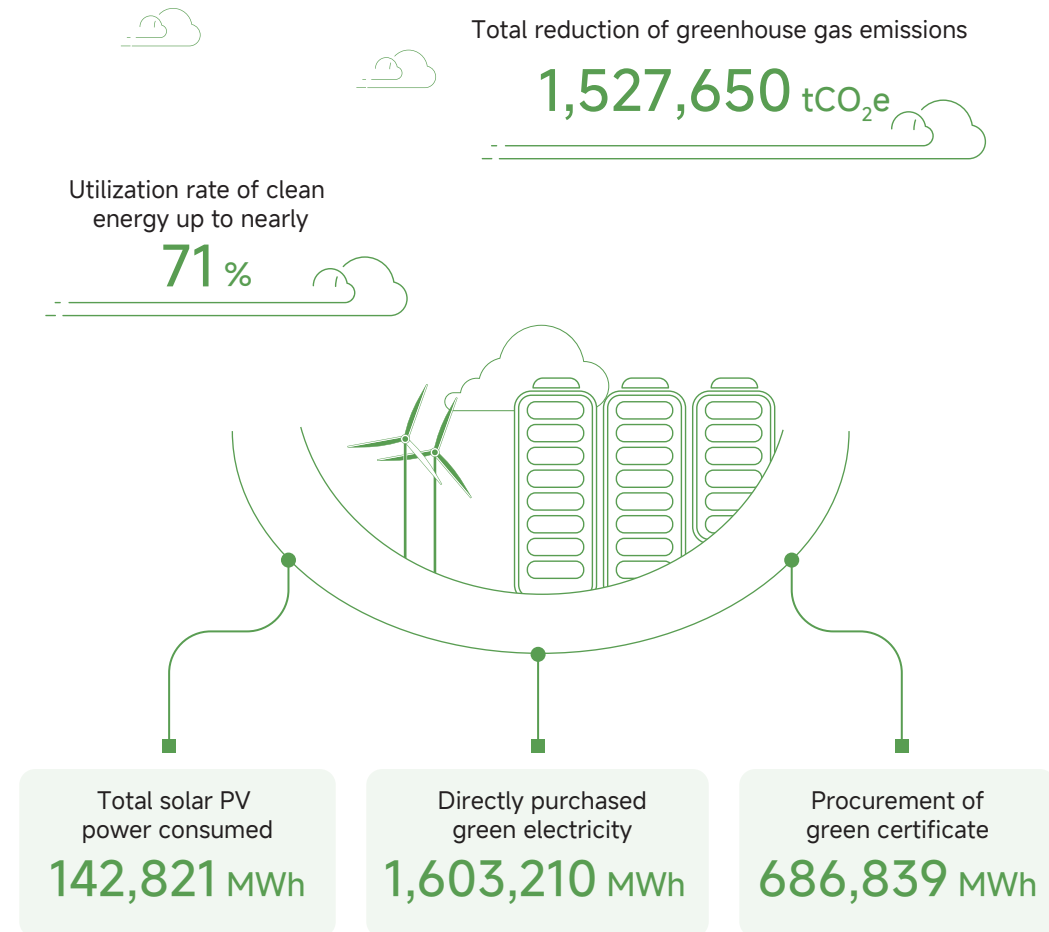
8 %

<sup>16</sup> Electricity saving rate = (Electricity saving in the current Reporting Period/Total electricity consumption in the previous Reporting Period) \*100%.

# Energy Structure Optimization

Promoting energy structure transformation is a key strategy for Luxshare Precision to reach its carbon-neutral goal. We have continued to expand the proportion of clean energy use and reduce greenhouse gas emissions through the layout of rooftop photovoltaic, construction of energy storage systems, and the purchase of green electricity and green certificates. As of the end of the Reporting Period, our rooftop photovoltaic capacity reached 150MW, **achieving utilization rate of clean energy up to nearly 71%**, exceeding the target of "50% of clean energy use by 2025" for two consecutive years.

In addition, the Company participated in the investment of the Green Energy Fund to promote the development of high-quality clean energy projects. During the Reporting Period, **the Company acquired 62,276MWh of green equity through its investment in the Green Energy Fund.**



## Case | Rida Intelligent Manufacture Laid Out Photovoltaic and Energy Storage Projects

Rida Intelligent Manufacture actively responds to the national energy transition and sustainable development strategy, laying out the construction of photovoltaic and energy storage projects. We make full use of the roof space of our factories to install photovoltaic power generation systems to provide clean, renewable power for our factories and reduce our reliance on traditional thermal power. As of the end of the Reporting Period, the total installed capacity of rooftop photovoltaic of Rida Intelligent Manufacture was nearly 22MW.

In order to enhance the ability to consume green electricity, Rida Intelligent Manufacture gives full play to the advantages of optical storage integration through the installation of energy storage power stations in the factory, accurately formulates the daily charging and discharging strategy of the energy storage system, optimizes the energy structure, stabilizes the power output and ensures the stable operation of the production equipment. During the Reporting Period, the battery capacity of Rida Intelligent Manufacture's new energy storage power station exceeded 6MWh, and the cumulative construction of energy storage power station battery capacity exceeded 9MWh.



Rooftop Photovoltaic



Energy Storage Power Station