



**2023**

**Environmental, Social and Governance (ESG) Report**

**Yingli Energy Development Co., Ltd.**





## About this Report

As the second Environmental, Social and Governance (ESG) Report issued by Yingli Energy Development Co., Ltd., this report is prepared in an objective, standardised, transparent and comprehensive manner to fully disclose Yingli Solar's specific measures, major practices, highlight cases and key performances in actively assuming social responsibility and promoting sustainable development and other areas in 2023, with a view to responding to the expectations of stakeholders and fulfilling its social responsibilities more efficiently in the future.

### Reporting Period

The Report is an annual report, covering the period from 1 January 2023 to 31 December 2023. In order to enhance the comparability and completeness of the Report, certain sections of the report appropriately retrospect previous years and include forward-looking statements.

### Reporting Scope

The Report takes Yingli Energy Development Co., Ltd. as the main body, covering the three major bases of Tianjin, Hengshui and Li County, namely:

- Yingli Energy Development (Tianjin) Co., Ltd. (hereinafter referred to as the "Tianjin Base"), Address: No. 5, Haihang East Road, Ninghe Modern Industrial Park, Tianjin Municipality, China
- Yingli Energy Development (Hengshui) Co., Ltd. (hereinafter referred to as the "Hengshui Base"), Address: No. 969, Wei 17 Road, High-tech Zone, Hengshui City, Hebei Province, China
- Yingli Energy Development (Li County) Co., Ltd. (hereinafter referred to as the "Li County Base"), Address: No. 655, High-tech Industrial Park, Yongsheng North Street, Li County, Baoding City, Hebei Province, China.

### References

This report was primarily prepared in accordance with the Sustainable Development Reporting Standards (GRI Standards) issued by the Global Reporting Initiative (GRI) and the requirements of the United Nations Sustainable Development Goals (UN SDGs 2030). It also extensively references relevant guidelines and directives, such as the ESG Reporting Guide of the Hong Kong Stock Exchange (HKEX) and other related guidance.

### Data Source & Assurance of Reliability

The information and data cited in this report are all derived from the internal documents of Yingli Solar or relevant public materials. This report was reviewed and approved for release by the company's Board of Directors. Yingli Solar guarantees that this report is free from false records, misleading representations, or material omissions, and Yingli Solar is responsible for the authenticity, accuracy and completeness of its content.

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## Chairman's Message

2023 has witnessed Yingli Solar's endeavors amid intense market competition and breakthroughs in overall business operation. Yingli vigorously promoted key projects, continually refined its corporate governance structure and operational management framework, and comprehensively advanced the construction of its management system, working hand in hand with partners to share both risks and opportunities.

### Yingli Solar is actively committed to reducing greenhouse gas emissions

2023 is the year Yingli Solar actively committed to reducing greenhouse gas (GHG) emissions. Based on the sustainable environmental philosophy, the company deeply integrated green and environment-friendly practices into all aspects of production and operations. Green, high-quality development has been elevated to a strategic level, with Yingli's long-term green development goals and directions clearly defined. Leveraging an integrated business model of "Innovation + Technology + Industry + Service," the company provided clients with industry-leading one-stop efficient services for comprehensive clean energy solutions. It initiated a green supply chain action plan to drive the coordinated green development of the photovoltaic industry.

### Yingli Solar continually enhanced its operational management level

2023 is the year Yingli Solar continually enhanced its operational management level, deeply engaged in corporate culture development and actively explored systemic and model innovations. External cooperation was also improved, on the basis of risk prevention, constantly promote a significant increase in overall operational efficiency. Through its Quality Month activities, Yingli Solar created a five-in-one quality management system to enhance product quality. 6S work groups were established to undertake 6S management in production, continuously improve work efficiency, and lay a solid foundation for its sustainable healthy development.

### Yingli Solar continued to strengthen research and technological innovation

2023 is the year Yingli Solar continued to strengthen research and technological innovation, kept driving business development and reduced production costs through innovation. It developed differentiated products based on market demand, made outstanding achievements in intellectual property construction and stayed at the technological forefront of the whole industry. Newly launched products included the Marine Star (suitable for marine environments), lightweight products for distributed markets, and the high-efficiency PANDA 3.0 n-type TOPCon Series products. Yingli also achieved record highs in the number of patents the company applied for and were granted.

### Yingli Solar vigorously developed its multi-layered talent team

2023 is the year Yingli Solar vigorously developed its multi-layered talent team, fully safeguarded employee rights and continually strengthened management training for cadres and new employees. The company put more effort on the recruitment of graduates from top universities and masters' programs, selecting high-quality, highly educated and skilled young talents as reserve cadres, and focused on building project management teams with stable core personnel. Yingli Solar is also collaborating with all parties for mutual development, fulfilling its corporate social responsibilities, supporting charitable causes, and contributing to societal development.

Success is achieved by persistence, and progress by action. Yingli Solar will rally its spirits, unite all efforts, and motivate employees with the spirit of the new era, striving to build a first-class photovoltaic enterprise. The company's development will be integrated into the national dual-carbon strategy to resolutely fulfill corporate mission, and drive the development towards a higher quality to showcase Yingli Solar's new responsibilities and achievements in the new era and journey ahead!





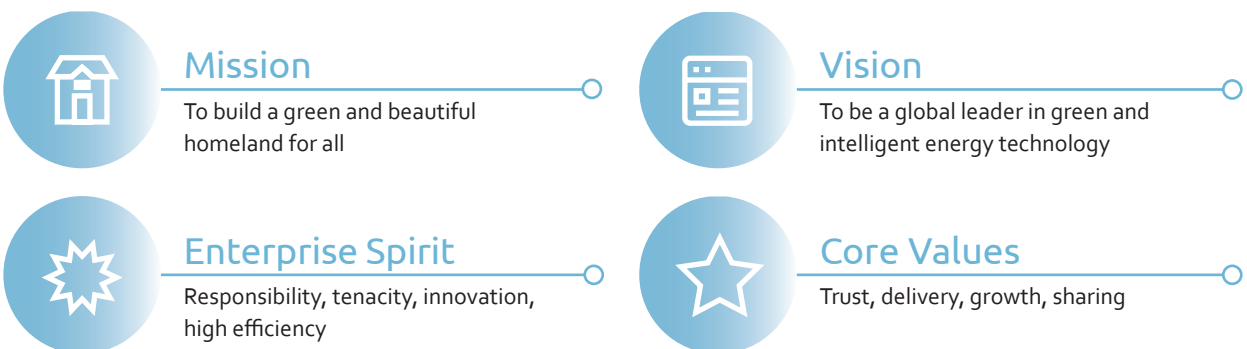
## ABOUT US

### Company Profile

Yingli Solar was among the earliest Chinese enterprises that engaged in the photovoltaic sector, and has now developed into a provider of smart photovoltaic energy solutions with focuses on R&D, intelligent manufacturing, and power plant development and operations. Yingli Solar has been in the photovoltaic industry for 24 years, with over 30 GW products available in more than 100 countries and regions across the world.

Headquartered in Baoding City, Hebei Province, Yingli Solar has set up manufacturing bases in Baoding, Tianjin, Hengshui, and Li County. Each base uses advanced instruments and equipment, making Yingli's entire production process intelligent, automated, precise, and efficient. Thanks to its extensive global service network, Yingli Solar operates branches and offices across Europe, Oceania, North America, Latin America, and Asia. This enables the company to offer localised service teams and after-sales service centres to customers worldwide.

### Corporate Culture



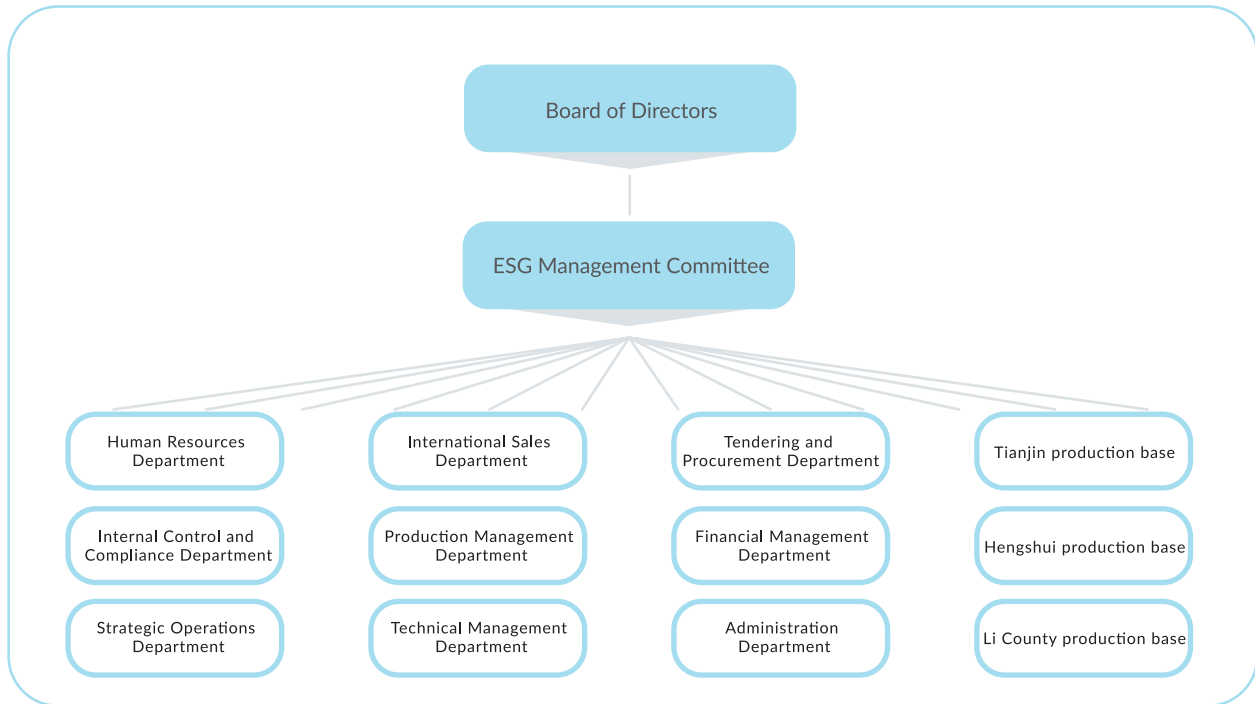
### Honours & Awards





## ■ ESG Governance Architecture

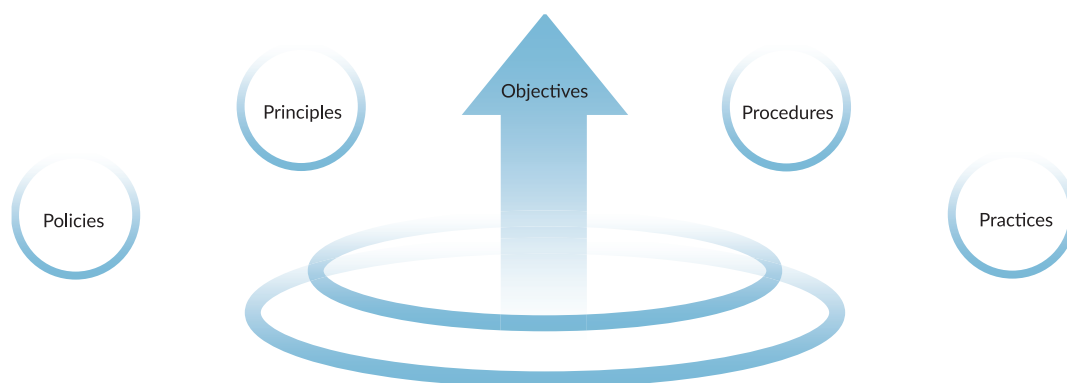
In order to strengthen the management of shareholders' rights, anti-corruption, internal control compliance, risk prevention and control, the control of product quality, labor rights, employee health and safety, supply chain management, and promote the green operation and sustainable development of the company, the ESG management committee is set up under the Board of Directors of Yingli Solar, responsible for the issuance and practice of ESG management policies.



ESG Management Committee	
The General Manager of Yingli Solar as the chairman of the committee	The Deputy General Manager and the Human Resources Director as the vice chairman of the committee
The managers of various departments and three major production bases constitute committee members	
Manage the corporate environment, including reducing carbon emissions, energy consumption and water use, ensuring that corporate environmental objectives are met, preparing regular environmental reports and conducting environmental audits;	
Pay attention to employee welfare, support community development, strive to safeguard consumer rights and interests, and ensure continuous improvement of social responsibility;	
Ensure reasonable operation of corporate governance, including internal control compliance, safeguarding business ethics, anti-corruption, safeguarding shareholders' rights and interests, and risk prevention and control.	



Yingli Solar has developed the SA8000 Management Manual in accordance with the Social Accountability International SA8000 Standard and Chinese labour laws and regulations, taking into account industry development trends and features of the company's strategy. The manual stipulates Yingli's policies, principles, objectives, procedures, and practices regarding social responsibility. It serves as the foundation for the company's fulfillment of social responsibilities, maintenance of positive labour relations, improvement of working conditions, and continuous enhancement of employee salary and welfare benefits. The company will regularly conduct internal audits and management reviews, and take timely and effective remedial and corrective actions when necessary to ensure that the company's business activities always comply with international labour standards and national labour laws and regulations.



## Discussion on Material Issues

To accurately convey Yingli Solar's progress in sustainable development to internal and external stakeholders, the company analysed domestic and foreign sustainable development-related standards, benchmarked industry enterprises' sustainable development information disclosure, and combined the company's actual development to identify important internal and external issues. Yingli Solar has formed an ESG issue database consisting of 17 ESG issues.



### Governance issues

- Corporate governance
- Internal control, compliance, and risk management
- Business ethics
- Economic performance and taxation



### Social issues

- Product quality
- R&D innovation
- Customer service and satisfaction
- Employment and labour guidelines
- Employee grievance mechanism
- Occupational health and safety
- Staff training
- Supplier Management
- Community engagement










### Environmental issues

- Environmental management
- Resource management
- Pollutant discharge and control
- Green operations

## Stakeholder Engagement

Yingli Solar attaches great importance to daily communication with stakeholders, establishes diversified communication channels to receive opinions and suggestions from important stakeholders (such as government and regulatory authorities, shareholders, employees, consumers, etc.), and strives to actively respond to the expectations and demands of stakeholders and jointly promote the sustainable development of all parties.

Stakeholders	Expectations and Demands	Response Approaches
 Government and regulatory authorities	Operate in compliance with the law Implement national policies	Operate in good faith Pay taxes according to the law Respond to national policies and regulations
 Stakeholders	Sustainable investment value Optimized corporate governance Performance growth	Create sustainable operational value Make scientific decisions Hold Shareholders' General Meetings
 Employees	Protect legal rights and interests Value career development Care for employees physically and mentally	Sign labor contracts in compliance Conduct regular staff training Strengthen safety production inspections
 Customers	Provide quality products and services Protect customer rights and privacy	Optimize quality management system Conduct product innovation and research Improve after-sales service network
 Partners/Suppliers	Ensure fair competition Win-win for both sides	Engage in sunshine procurement to eliminate commercial bribery Establish a supplier audit and evaluation mechanism Promote collaboration and communication
 Communities	Serve community development Protect the ecological environment	Participate in community co-construction Save energy, reduce emission, and strengthen the Three Waste Management Identify environmental risks and strengthen environmental information disclosure
 Media/NGOs	Disclose information Interact with the media	Disclose information timely through official websites, newspapers, online media and other channels Establish complete media communication mechanisms





A scenic landscape photograph featuring rolling hills in the background, a white post-and-rail fence in the middle ground, and a body of water in the foreground. The sky is a clear, bright blue. The image is split vertically: the left half shows the original color photograph, while the right half is a semi-transparent blue overlay containing the text.

# ENVIRONMENTAL

Embracing Green Initiatives,  
Contributing to the Wisdom of  
Low-Carbon Energy



## Combating Climate Change

Global warming has been acknowledged as a key environmental issue in the world. Yingli Solar understands the impact of GHG emissions on our planet's environment and ecology. Based on the concept of sustainable growth and the obligation to fulfill corporate social responsibility, the company actively strives to reduce GHG emissions. Yingli Solar has established a dedicated strategic planning management system and has clearly defining the company's long-term green growth goals and directions. Specific measures to reduce GHG emissions, improve energy efficiency, and conserve resources are included in Yingli's three-year strategic plan.

Yingli Solar continues to conduct research and invest in carbon emission reduction technologies, striving to promote the development and application of clean energy, and contributing to environmental protection and green growth. As a photovoltaic industry pioneer in carbon neutrality, Yingli has accomplished the following:



The first Chinese company, and the first in the world's photovoltaic field, to join WWF's Carbon Emission Reduction Pioneer project.



China's first photovoltaic company to join PV Cycle.



The world's first photovoltaic company to receive the TÜV Rheinland carbon footprint certification.



The FIFA World Cup's first zero-emission sponsor and zero-emission display area.



Participated in the compilation of the first clean production evaluation indicator system in the domestic photovoltaic industry.



One of the first photovoltaic companies to release the Carbon Neutrality White Paper, working together with upstream and downstream companies to promote carbon neutrality.

Yingli Solar adheres to the requirements of ISO 14064-1:2018 standard and identifies emission sources as per the organisational boundaries of Yingli Solar. It identifies the GHG emissions for the year 2023 from Yingli Solar headquarters and three production bases (Tianjin Base, Hengshui Base, and Li County Base), and compiles the Energy Carbon Emission Report. Emission sources include:

Emission Source	Workshop/Activity or Equipment Name
Direct emission sources (Scope 1)	Refrigerant for refrigerator (R134a leakage), natural gas for catering, steam for heating, diesel for emergency power system engines (including pickup trucks), CO2 portable fire extinguishers (CO2 leakage), septic tanks (CH4 leakage), product logistics (diesel)
Energy indirect emission sources (Scope 2)	Electricity input for various equipment
Other indirect emission sources (Scope 3)	Personnel travel (cars, trains, airplanes)

GHG Emissions from Yingli Solar Headquarters and Three Production Bases in Scope 1 and Scope 2

	Actual Situation in 2023	Actual Situation in 2022
Total GHG emissions (tCO <sub>2</sub> e)	71,939	58,367
Unit Output GHG Emission Intensity (tCO <sub>2</sub> e per megawatt)	15.32	17.96

In 2023, Yingli Solar expanded the production capacity of the Li County and Tianjin production bases, increasing output by approximately 45% compared to 2022. The company effectively promoted GHG emission reduction activities in the product manufacturing process, resulting in a 15% reduction in GHG emission intensity in 2023.

Production in 2023 increased around  
**45%** compared to 2022





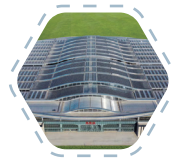
greenhouse gas emissions intensity  
in 2023 reduced by **15%**

### Promoting Green Development in the Industry

By virtue of its integrated business growth model of "Innovation + Technology + Industry + Service," Yingli Solar provides customers with industry-leading clean energy solutions and efficient one-stop services. The company's power station business involves distributed photovoltaic power stations, industrial and commercial rooftops, distributed throughout the county, large and medium-sized ground-mounted photovoltaic stations, agricultural-photovoltaic complementary power stations, and fishery-photovoltaic complementary power stations. By effectively integrating R&D, manufacturing, and application in the photovoltaic solar energy industry, Yingli is developing residential distributed business. Yingli Solar seizes the favorable opportunity of the global energy structure's green transformation, adheres to innovation-driven development, focuses on the development of clean energy, actively constructs a green energy system, and contributes to the realisation of carbon neutrality goals.

#### Business involves

- Distributed photovoltaic power stations
- Industrial and commercial rooftops
- Large and medium-sized ground-mounted photovoltaic stations
- Fishery-photovoltaic complementary power stations
- Distributed throughout the county
- Agricultural-photovoltaic complementary power stations

Ground level station projects	Commercial projects	Residential and Photovoltaic+ Projects
 <p>Zhangbei "Internet + Smart Energy" Demonstration Project Project Capacity: 240 MW</p>	<p>Great Wall Motor Photovoltaic Rooftop Grid-connected Power Generation Project Project Capacity: 45 MW</p>   <p>Maracanã Stadium Project Project Capacity: 390 KW</p>	<p>Shanghai Hongqiao Station Project Project Capacity: 6.7 KW</p>   <p>Xiong'an High-speed Railway Station Project Project Capacity: 6 MW</p>



## Yingli Solar's Solutions Making a Debut in the International Market

As a long established player in the photovoltaic industry, Yingli Solar provides component products and technical services for various projects overseas, enjoying enduring influence and strong competitiveness both domestically and internationally. The company has been honored with certifications such as Top PV Brand by EUPD and Best Performance by PVEL as a component manufacturer. Through the participation in various international exhibitions, Yingli Solar has laid a solid foundation for deepening cooperation with local clients. In the future, Yingli Solar will strengthen its R&D of differentiated products and innovation, aiming to provide higher quality solutions and attentive services globally, contributing to the process of global carbon neutrality.



**EUPD**  
**Top PV Brand**

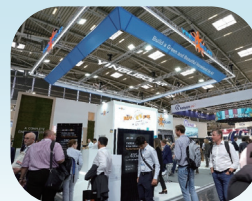
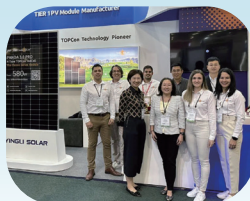
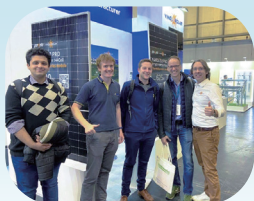


**PVEL**  
**Best Performance**



### Case: Yingli Solar Products Shining at International Exhibitions

The 144-cell and 156-cell N-type TOPCon modules were exhibited at The Green Expo in Mexico.



Products such as the Panda 3.0 Series 625W dual-glass modules and 580W dual-glass modules were showcased at the Solar & Storage Live UK.

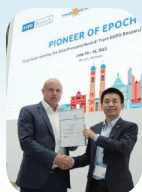
The Panda 3.0 series of sea, land, and air all-scenario application modules were featured at the Intersolar Europe.



### Case: Yingli Solar Winning EUPD Germany SolarProsumer Award



On June 15, 2023, during the Intersolar Europe exhibition, the European authoritative research institution EUPD Research awarded Yingli Solar the "Solar Prosumer Award."



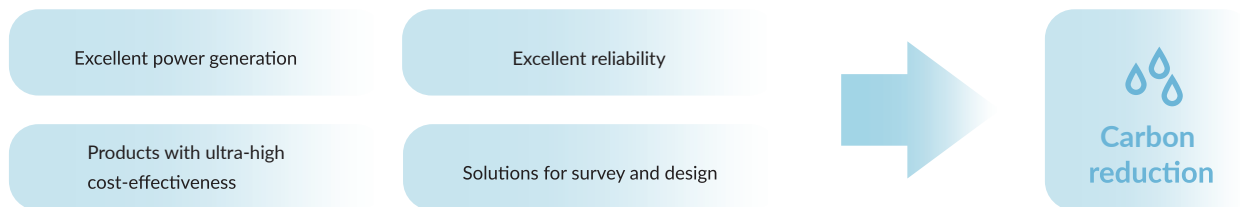
In the 2022-2023 survey, Yingli Solar stood out among numerous photovoltaic enterprises, receiving the top certification in the component category of the SolarProsumer Award in the German market, demonstrating the brand's influence in the German market once again.



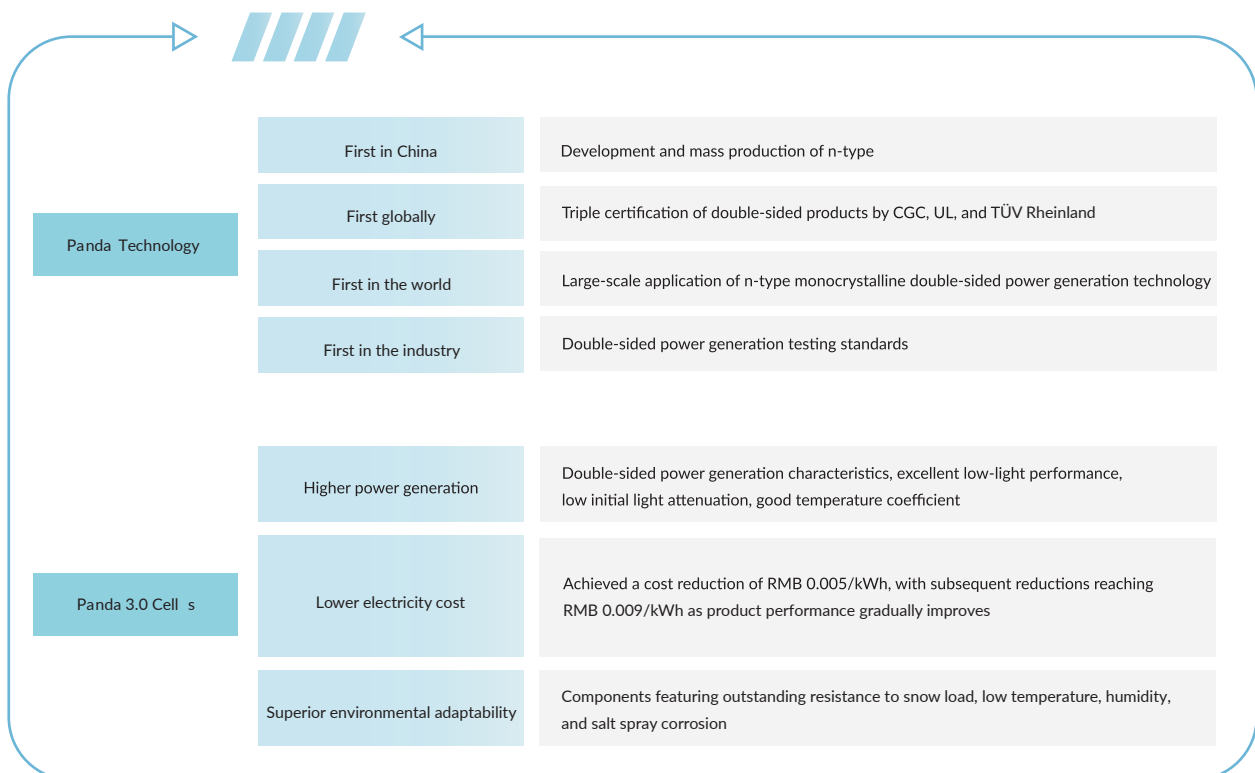
## Advancing Green Transformation

### Product Design

Yingli Solar is committed to complying with relevant environmental regulations and strives to develop environmentally friendly and resource-saving products. In 2009, the company collaborated with TÜV Rheinland to conduct a carbon footprint analysis report on the Yingli's photovoltaic modules. Currently, plans are underway to establish an internal carbon reduction platform, set up an internal carbon management team, and establish a carbon asset management department. The company designs emission reduction plans and determines emission reduction paths tailored to its specific circumstances; develops internal carbon asset management system; and utilizes green financial tools to maximize cost reduction and efficiency improvement. Yingli Solar will work with internationally renowned carbon footprint certification agencies to further expand certification for its full range of products.



As a pioneer in the research and production of n-type batteries in China, Yingli Solar has utilised independently developed core technologies and national-level experimental capabilities. With the support of national programs such as the National 863 Program, the 973 Program, and the National Key R&D Program of China, Yingli has achieved the first large-scale application of n-type monocrystalline double-sided products and formulated the first testing standards. Continuously exploring the frontiers of power generation and cost per kilowatt-hour of n-type batteries, Yingli Solar has realised the practicality of n-type batteries in all climates and latitudes, providing distributed users with excellent power generation, outstanding reliability, and products with superior cost-effectiveness, as well as surveying and designing solutions to help meet the “dual carbon” goal.





## Green Procurement

Yingli Solar has initiated the Green Supply Chain Action Plan, jointly releasing the Green Supply Chain Supports Carbon Peaking and Carbon Neutrality Initiative with nearly a hundred enterprises in the new energy industry chain. The initiative calls for all frontline suppliers of Yingli Solar to make strong commitments to improving energy efficiency and reducing GHG emissions, thereby promoting the green coordinated development of the industry.



Case: Mr. Yin Xulong, Chairman of Yingli Solar, invited to attend the 2023 Green Low-Carbon High-Quality Development Conference



During the 2023 Green Low-Carbon High Quality Development Conference, Yingli Solar, in collaboration with the Yantai Municipal Government, the Supply Chain Working Committee of the China Petroleum and Chemical Industry Federation, and the Research Institute of Machinery Industry Economic & Management, among other relevant entities, jointly established the New Energy Equipment Industry Alliance. This alliance aims to support the transformation and upgrading of Shandong's green energy industry.



Case: Yingli Solar Invited to Participate in the 2nd China PV Green Supply Chain Conference



On 18 August 2023, Yingli engaged in discussions with numerous industry representatives on the new trends in photovoltaic development to empower the green, low-carbon, and sustainable development and market application of the photovoltaic industry, and signed a strategic cooperation agreement on carbon footprint with China Testing & Certification International Group Co., Ltd. ("CTC") during the Photovoltaic Carbon Assessment and Management forum of the 2nd China PV Green Supply Chain Conference hosted by CTC.

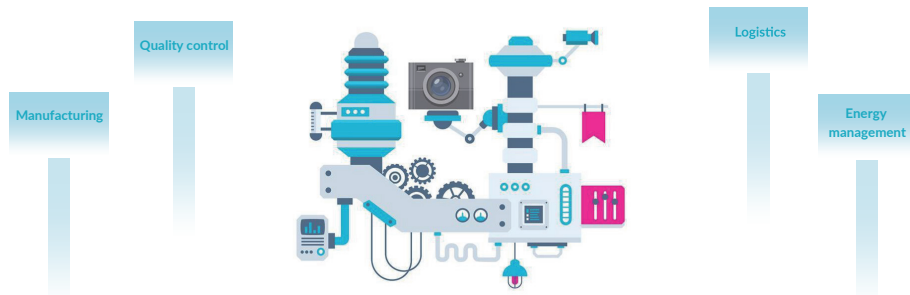
## Green Production

Yingli Solar actively embraces the concept of carbon neutrality, focusing on the utilisation of green energy and enhancing energy efficiency, as well as promoting clean and low-carbon development. The company continuously conducts research and innovation in carbon reduction technologies, striving to advance the development and application of clean energy, and contributing to environmental protection and green development.



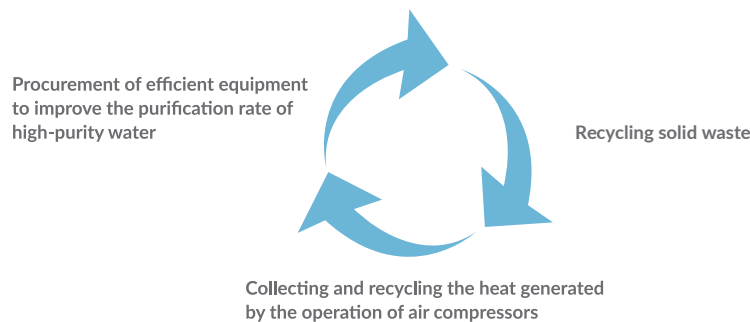
### Intelligent Manufacturing

Yingli Solar concentrates on photovoltaic smart manufacturing and emphasises the development of the power station industry. All industrial bases are equipped with industry-leading equipment and process technologies. Leveraging highly automated and intelligent production line technologies, including fully automated AGV logistics transport vehicles, MES intelligent manufacturing systems, automated testing and sorting, automated packaging line equipment, and R&D testing equipment, the company achieves a high degree of automation in manufacturing, quality control, logistics, and energy management. This results in intelligent interconnection of production line equipment and digitised operations, establishing technology application production lines and “smart factories” at the international forefront. Yingli Solar has devoted to zero carbon park construction and established an intelligent energy system, which is fit for equipment and photovoltaic applications related to the power and environmental protection, to achieve zero carbon manufacturing and green manufacturing.



### Green Factory

The 5 GW battery project in Mancheng, Baoding adopts the concept of a green factory, investing heavily in establishing an energy consumption monitoring and management system to monitor energy consumption data in the plant area and take targeted measures. Through the procurement of efficient equipment to improve the purification rate of high-purity water, and measures such as collecting and recycling the heat generated by the operation of air compressors and recycling solid waste, Yingli Solar achieves ESG management and production goals.



### Energy Management

In order to strengthen energy management, reduce energy consumption and improve energy efficiency, Yingli Solar has formulated an Energy Management System. The company actively adopts new technologies, processes, materials, and equipment; promotes progress in energy-saving technology; formulates annual energy-saving project plans and Energy-Saving and Consumption-Reduction Project Transformation Plans; and supervises, inspects, and evaluates the implementation of energy-saving projects. An energy-saving incentive mechanism has also been established to encourage employees to launch and participate in energy-saving work.



In 2023, Yingli Solar promoted energy-saving projects, achieving an annual electricity saving of approximately 3.802 million kWh.

#### Summary of Energy Conservation and Emission Reduction Projects in 2023

Project Name	Energy Saving Amount	Project Description
Optimization and Upgrading of Process and Air Conditioning Systems in Tianjin	Saved 476,000 kWh of electricity annually	The operation of workshop processes and air conditioning systems is complex, and efficient motors are used to improve the efficiency of water pump operation.
Upgrading and Transformation of Screw Air Compressors in Tianjin	Saved 2.04 million kWh of electricity annually	The equipment in the production fluctuation power equipment and component workshop lacks flexibility in matching. Efficient two-stage screw compressors are used to improve equipment operation efficiency, better matching the production situation in the component workshop.
Optimization Project for Process Cooling Water in Hengshui	Saved 500,000 kWh of electricity annually	The process cooling water circulation system is renovated, and the equipment is reconfigured. While ensuring stable production operation, significant electricity savings are achieved.
Zero Gas Consumption Dryer Project in Hengshui	Saved 600,000 kWh of electricity annually	Industry-leading zero gas consumption blowing-type dryers are used to replace existing dryers, significantly reducing gas consumption, lowering operating costs, and saving energy.
Energy-saving Transformation Project for Cooling Water Systems in Li County	Saved 186,000 kWh of electricity annually	Cooling water and chilled water pipelines are connected to the condenser and evaporator of the chiller, respectively. During periods of low temperatures in winter, the chiller water temperature and load are low, resulting in surges and shutdowns. An additional connecting pipeline is installed between the cooling water and chilled water to use a cooling tower to cool the cooling water during periods of low winter temperatures when the chiller is shut down.
Energy-saving Transformation Project for Air Compressors in Li County	Saved 200,000 kWh of electricity annually	The utilization rate of air compressors used in Workshop 4 of is low. By connecting the pipelines of Workshop 1 to Workshop 4, the compressed air discharged by the air compressors in Workshop 4 is reused by Workshop 1, improving the efficiency of the air compressors in Workshop 4, reducing the need for air compressors in Workshop 1, and saving energy.



Energy Use Management	
Equipment power management	For major power-consuming equipment, reasonably allocate the start-up rate and start-up sequence, improve the single load rate, and reduce the unit consumption of products. Supervise and inspect the energy-saving and economical operation of power equipment and power-consuming equipment.
Equipment energy management	Timely check the energy-using equipment to avoid energy waste such as running and dripping. Require the equipment to stop according to the equipment maintenance requirements when not in production, maintenance and overhaul. Reduce the no-load operation of production and power equipment, maximize the load ratio, and reduce the unit energy consumption. Reduce standby energy consumption of office equipment such as computers, printers, and copiers.
Air conditioning and heating energy management	Strengthen the rational use of air conditioning and heating systems, clarify the using conditions and related requirements, and control the temperature and use time of air conditioning in office areas.
Lighting energy-saving management	Maximize the use of natural light and reduce the number of lights under the premise of meeting the illumination. Promote the concept of power saving, eliminate long light and daylight. Apply light-glass on the roof and keep the light-glass with good light transmission with regular cleaning.
Other energy management	Check the gas supply pipeline to avoid leakage and unreasonable use, regularly inspect the gas supply equipment and facilities to ensure the efficiency of the equipment. According to the requirements of relevant standards, take thermal insulation measures for heating (cooling) pipelines and equipment, clean them frequently to ensure the heat exchange efficiency of heat exchange equipment, and timely check the equipment accessories and insulation structure of heating (cooling) equipment.





## Green Logistics

Yingli Solar considers the complete lifecycle of its products. As the first Chinese company to join PV CYCLE, the company pledges to recycle all photovoltaic modules beyond their service life, contributing jointly to the return and recycling of photovoltaic modules, and striving to achieve green photovoltaics throughout the entire lifecycle.

In January 2023, a complete set of key technologies and application demonstration projects for green recycling and processing of crystalline silicon photovoltaic modules were approved as the third batch of intelligent photovoltaic pilot demonstration projects.



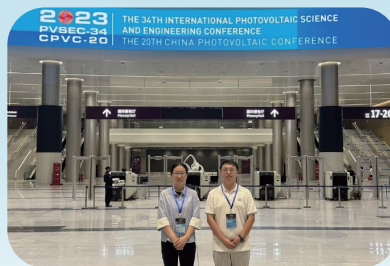
### Case: "N-Type Leading, Convergence of Production Chain," the Company Invited to attend the 2023 Energy Materials Innovation and Sustainable Development Frontier Forum



From 17-20 November 2023, the Energy Materials Innovation and Sustainable Development Frontier Forum (organised by Southeast University and OAE Publishing Inc.) was held in Xi'an. Yingli Solar was invited to attend the conference and delivered a keynote report entitled *PANDA 3.0: Research and Challenges of New Generation TOPCon High-Efficiency Battery Technology* at the sub-forum.



### Case: Yingli Solar Participating in PVSEC for Global Energy Development Prospects



From 6-10 November 2023, the 34th International Photovoltaic Science and Engineering Conference (PVSEC) was held at the Shenzhen World Exhibition and Convention Center. Representatives of Yingli Solar's technical team submitted papers related to TOPCon technology and attended the conference.

## Strengthening Environmental Management

### Environmental Management System

Implementing the national Environmental Protection Law, Yingli Solar has established the environmental management system according to the requirements of ISO 14001:2015 standards, formulated the General Principles of Environmental Management (Trial) and other rules and regulations, and prepared the 2023 version of the EHS Management Manual. To continuously improve and enhance the company's comprehensive environmental management level, Yingli Solar determines the division of environmental protection responsibilities and management requirements, analyses environmental risks and opportunities, improves environmental protection emergency response capabilities, and conducts environmental performance evaluations.





## Three Waste Management

Yingli Solar strictly abides by the Air Pollution Prevention and Control Law, Solid Waste Pollution Environmental Protection Law and other relevant laws and regulations. The Hengshui Base has formulated the Pollutant Discharge Management Measures and the Hazardous Waste Management Measures. The Li County base has formulated the Pollutant Discharge Management Procedures and the Hazardous Chemical Control Management Procedures. The Tianjin Base has formulated documents such as the Solid Waste Pollution Prevention and Control Management Procedures and the Hazardous Waste Management System, and regularly monitors the wastewater, exhaust gas, noise, VOC and other figures to ensure that the pollutants discharged by the company meet the relevant standards.



### Waste Gas Management

Tianjin Base	Adopted photo-oxygen activated carbon integrated equipment to collect and treat workshop waste gas, integrated UV photolysis oxidation technology and activated carbon absorption technology, degrading pollutants and reducing pollution to the environment.
Hengshui Base	Implemented catalytic combustion treatment for workshop exhaust gas, match the exhaust gas treatment facilities and maintain normal operation to ensure the emission of exhaust gas pollutants in compliance with the appropriate standards.
Li County Base	Adopted cartridge dust collector + activated carbon + catalytic combustion exhaust gas treatment measures, applied exhaust gas treatment facilities (e.g. fans and spraying circulation pumps), adopted measures to control unorganised dust emissions.



### Waste Water Management

Yingli Solar attaches great importance to the conservation and sustainable use of water in its production line and actively promotes sustainable water resources management practices.

Regularly track the resources being consumption, strictly control the amount of water used for production, and requiring the valve be closed when not in use.

Spread advanced experience and technology in water conservation, promote the application of water-saving equipment and appliances, and improve the efficiency of water resources.



Frequently check regional pipelines and repairing those that are damaged, and prohibiting the unauthorised connection of water.

Implement the reuse of resources; increase the use of reclaimed and recycled water; and encouraging the use of reclaimed and recycled water in landscaping, environmental sanitation, and construction.

#### Tianjin Base

Domestic wastewater is incorporated into the municipal sewage network after pretreatment and discharged into the sewage treatment plant of the park. The sewage discharge is monitored quarterly and all meet the standards.

#### Hengshui Base

Rainwater and sewage are separated within the factory area, and a wastewater online monitoring station is set up at the total discharge outlet of the factory area, equipped with automatic monitoring equipment to ensure the discharge of water pollutants meets standards.

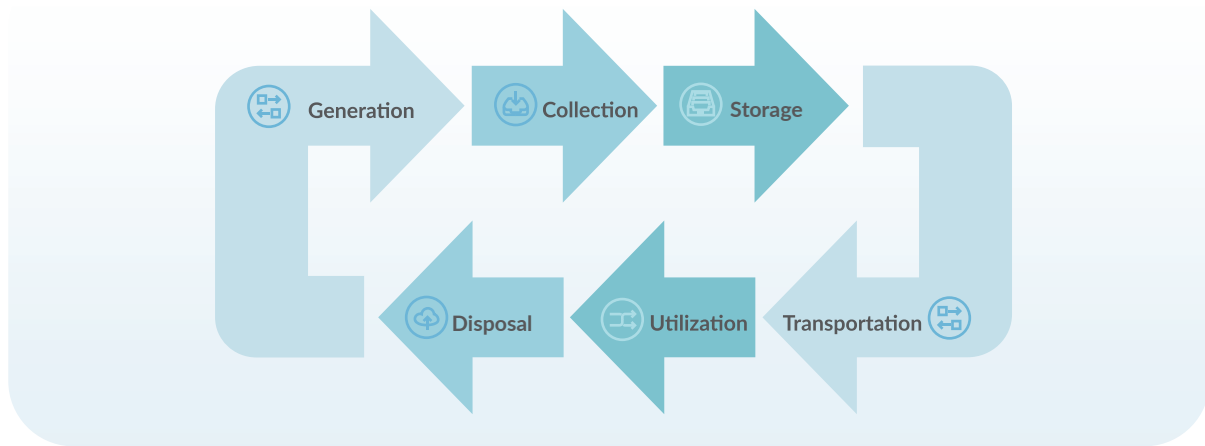
#### Li County Base

Domestic wastewater is discharged into the sewage treatment plant by the sewage network of the park. Formulate operating procedures for wastewater treatment, standardize sewage facilities, regularly monitor water treatment and operation.



## Waste Management

For industrial solid waste, Yingli Solar has established a system for pollution prevention and control of the whole process of industrial solid waste generation, collection, storage, transportation, utilisation and disposal. Yingli records the type, quantity, flow, storage, utilisation and disposal of industrial solid waste, and takes measures to prevent industrial solid waste from polluting the environment in addition to reducing its generation in the first place.



For hazardous waste, Yingli Solar uses qualified vehicles and disposal units for transportation and disposal. Hazardous waste is collected and stored appropriately with the containers, storage facilities, transport and hazardous waste disposal facilities clearly marked with hazardous waste identification labels.

Tianjin Base	Attach importance to anti-dispersion, anti-erosion and anti-leakage, collect household wastes by classification, and recycle waste paper, waste metal, waste glass, waste plastic and other materials. Establish the hazardous waste management plan, unify the collection of hazardous waste, properly store and hand over to qualified units for treatment to ensure that hazardous waste is harmlessly disposed of and to protect environmental safety.
Hengshui Base	The disposal of hazardous waste, the centralised collection and treatment of general industrial solid waste, are commissioned to sign the disposal or comprehensive utilization agreement with qualified units in accordance with the law, for disposal or recycling.
Li County Base	The base uses advanced production processes and equipment to reduce the amount of industrial solid waste generated and to reduce the hazardousness of industrial solid waste. Waste activated carbon, waste oil, etc. is handed over to qualified units for unified treatment. Hazardous wastes, general industrial solid wastes and domestic wastes are all properly disposed of.









# SOCIAL

Putting People First,  
Contributing to a Harmonious Society





## Based on Quality Service

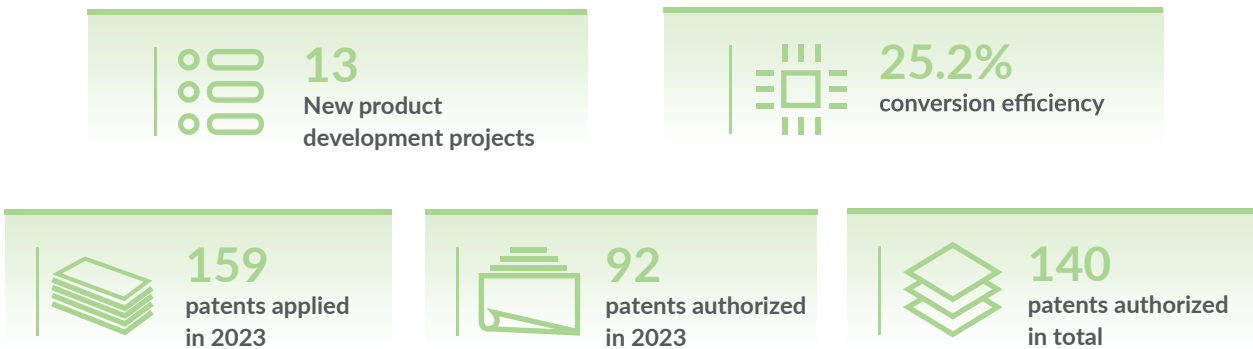
### R&D Innovation

Yingli Solar's R&D projects follow the IEC 16949 and ISO 9001 standards from preliminary research, project initiation, product design, sampling, trial production, stage validation to project acceptance, and product promotion. A series of systems have been formulated, including the Advanced Product Quality Planning (APQP) Control Procedure, Design and Development Control Procedure, and Yingli Solar R&D Project Management Measures. The company has always regarded independent innovation as the fundamental means to enhance its core competitiveness, promoting industry progress through the R&D of advanced technologies.



In 2023, there were 13 new product development projects, including the industrial application of TOPCon cells with a conversion efficiency of 25.2%, the design and development of lightweight double-glass modules, and the development and research of marine modules.

Yingli Solar filed 159 patent applications in 2023, 92 of which were granted. As of the end of 2023, the cumulative number of patented grants reached 140.





### Case: Yingli Solar Attending the Ceremony for the 13th China International Patent Fair



From 14-16 October, the 13th China International Patent Fair was held at the Dalian World Expo Center. Yingli Solar presented its PANDA 3.0 PRO module products at this exhibition. Yingli Solar's invention patent Solar Cell Heat Treatment Process won the Excellence Award at the 22nd China Patent Awards.

### Technology-related Honors and Awards



#### Won two silver medals in the final of the Hebei Province Innovation Method Competition..

In March 2022, the Company won two silver awards in the final of the Innovation Method Competition in Hebei Province.



#### Hebei Province Science and Technology Progress Second Prize

In November 2023, the projects of Research and Industrialization of High-Reliability Ion Beam Graphical Precision Doping Solar Cell Components Technology" and Technological Research and Industrial Application of Photovoltaic Cell Cutting Loss Passivation Repair" won the second prize of Hebei Province Science and Technology Progress Award.



#### Third Prize of Hebei Province Technology Invention Award

In November 2023, the project of Research on Key Technologies for High Power Generation Photovoltaic Module Reliability Testing and Standard Formulation" won the third prize of Hebei Province Technology Invention Award.



#### Two silver medals and one bronze medal in the final of Hebei Province Innovation Method Competition

In November 2023, the Company won two silver awards and one bronze award in the final of the Innovation Method Competition in Hebei Province.

### Technology Innovation Platform



Recognition from UL witness free testing (the U.S.), CNAS, and China General Certification's Witnessing Laboratory



Standard Setting

Yingli Solar has hosted and participated in the drafting of 118 domestic and international standards.



The first domestic double-sided photovoltaic power generation standard

Filling the gap in the testing standards for double-sided power generation components in China, opening up the promotion and popularization of "double-glass + double-sided power generation" technology, and laying a solid theoretical foundation.

The industry's first clean production evaluation index system

Guiding photovoltaic cell enterprises to promote clean production in depth, improve energy conservation, emission reduction, and pollution prevention levels, and promote the sustainable development and environmental friendliness of the photovoltaic cell industry.



The first national technical standard innovation base in the photovoltaic field



Hebei Solar Photovoltaic Standardization Technical Committee as the undertaking unit



SEMI International Standards Outstanding Contribution Award



Advanced Unit in Enterprise Standardization



Advanced Enterprise in Standardization



Outstanding Contribution Enterprise

In 2023, Yingli Solar edited and participated in the formulation of 9 standards, including 4 SEMI international industry standards and 5 group standards. The company has edited and participated in the formulation of a total of 13 standards, including 4 SEMI international industry standards and 9 group standards.



9 standards edited and participated



4 SEMI international industry standards



5 group standards



13 standards edited and participated in total



4 SEMI international industry standards in total



9 group standards in total



Case: Yingli Solar was invited to participate in the World Standards Day publicity activities in Baoding in 2023



On the morning of 14 October 2023, the World Standards Day publicity activities kicked off in Baoding City. Yingli Solar's participation in the event came about due to the company's outstanding efforts in the standardisation of the photovoltaic field in Baoding City and the undertaking unit of the national technical standard innovation base.



Case: The photovoltaic innovation base was invited to participate in the China Photovoltaic Industry Association Standardization Technical Committee



On 27 October 2023, the Battery Working Group of the China Photovoltaic Industry Association Standardization Technical Committee held its second working meeting in Zhoushan City, Zhejiang Province.



### Industry Exchange and Cooperation

Yingli Solar actively engages in industry exchanges; strives to establish close cooperation with industry organisations, partners, universities, and other stakeholders; promote the sharing of multiple resources and complementary advantages; and achieves scientific growth of the enterprise.



#### Case: School-Enterprise Exchange Promotes Development - Hebei University of Technology Visits Yingli Solar



On 25 October, Professor Chen Haiyong, Vice Dean of the School of Artificial Intelligence and Data Science, and Professor Liu Kun led a delegation from Hebei University of Technology to visit Yingli.



On 13 September, Professor Liu Hong and a team of five from the MBA Case Development Center of Hebei University of Technology visited Yingli to conduct research on the company's practices in green and smart transformation.

### Intellectual Property Protection

Yingli Solar issued the Yingli Energy Development Co., Ltd. Patent Management Measures, which clearly defined the organisation and responsibilities of innovation management; registration and protection requirements; patent transformation and introduction processes and requirements; appraisal and evaluation; as well as assessment and reward-penalty requirements, forming a comprehensive intellectual property management system.

#### Intellectual Property Management System Certification

In June 2023, the company obtained the Intellectual Property Management System Certification through intellectual property management system certification.

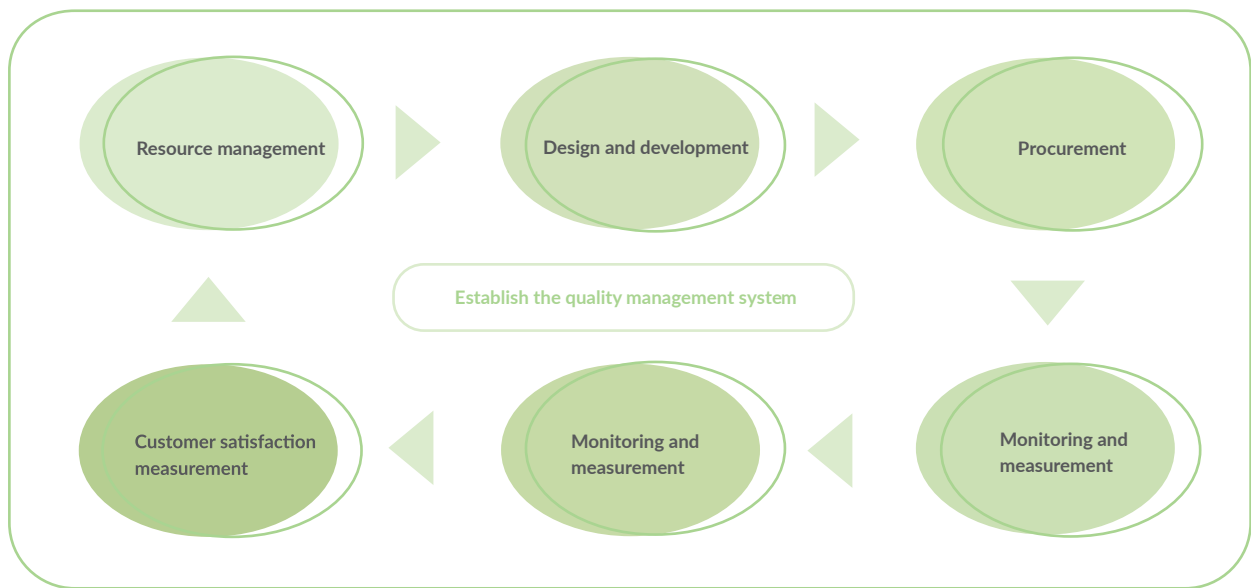
#### National Intellectual Property Advantage Enterprise

In November 2023, Yingli Solar was awarded the title of National Intellectual Property Advantage Enterprise.



## Product Management System

Yingli Solar has established a quality management system in accordance with the requirements of ISO 9001:2015 standards. The system covers all aspects of the production process including resource management, design and development, procurement, monitoring and measurement, non-conformity control, and customer satisfaction measurement.



Yingli Solar's quality management system is divided into four levels:

 <b>Quality manual</b>	Designed to determine the quality policy and goals of the Company, delineate the responsibilities and authorities of each functional department and business processes of the management system
 <b>Procedure documents</b>	Designed to elaborate the specific work flow required to carry out various business activities
	Process product questionnaires, technical standards, inspection specifications, operating procedures, work instructions, special management systems, etc.
	Records and forms related to product quality



In 2023, the product qualification rate at Yingli Solar's headquarters reached 99.98%, an improvement from the rate in 2022.



99.98%

Product qualification rate



#### Case: Summary of the "Quality Month" Activities in 2023



Yingli Solar focused on the theme of "Everyone Participates, Quality First, Production Safety, and Development Promotion" during the Quality Month activities. Through a series of events, the company promoted quality culture, enhanced the awareness of quality among all employees, improved the level of quality management, and promoted the development of the company's quality culture.

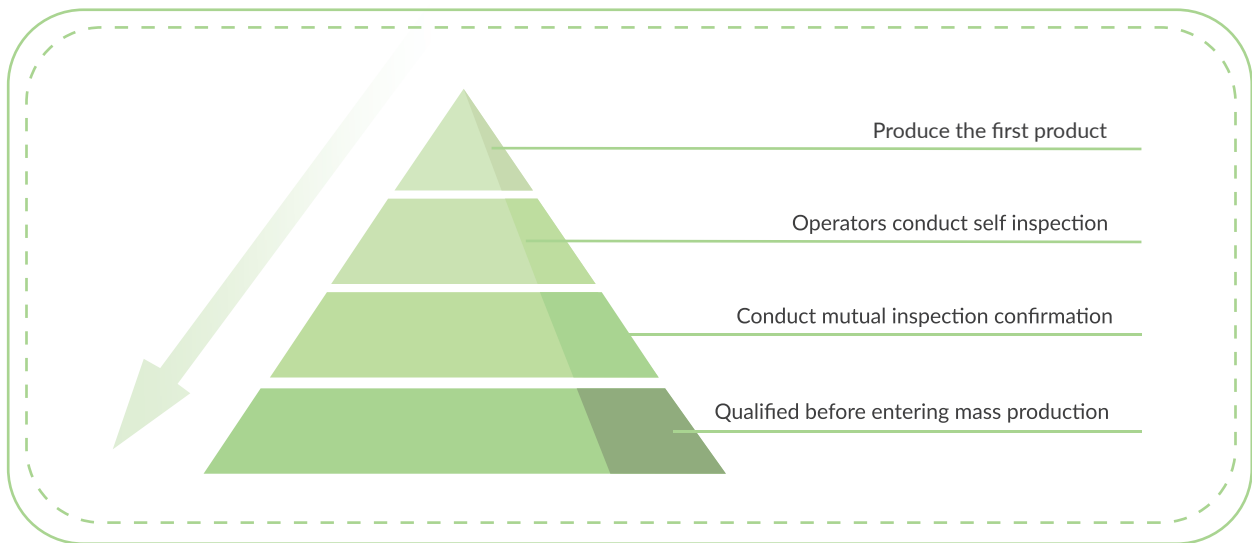
#### Product Labeling and Traceability

Product labeling aims to trace the formation process of product quality. Labels, nameplates, documents, records, seals, paint writing or other marks are used for product labeling based on specific conditions. Purchased materials should maintain the original markings of the materials (such as labels, specification markings, ex-factory test reports, etc.), and for products requiring quality certification documents, product qualification certificates, quality proofs (warranties), etc. must be attached as the product's label.

Incoming Materials	Allowed to set aside special areas in the warehouse as "to be inspected" area, "qualified" area, "unqualified" area.
Products in Production Process	Marked with their corresponding production records and inspection records as product labels and "to be inspected", "qualified products", "unqualified products", "to be processed", "reworked products", "scrapped" and other inspection status labels.
Final Products	Labels attached and anti-forgery are generally used for the labeling of final products, and inspection records as the final product "qualified" or "unqualified" label.
Ex-Factory Products	The final product label plus the qualification certificate is used as the label for ex-factory products.

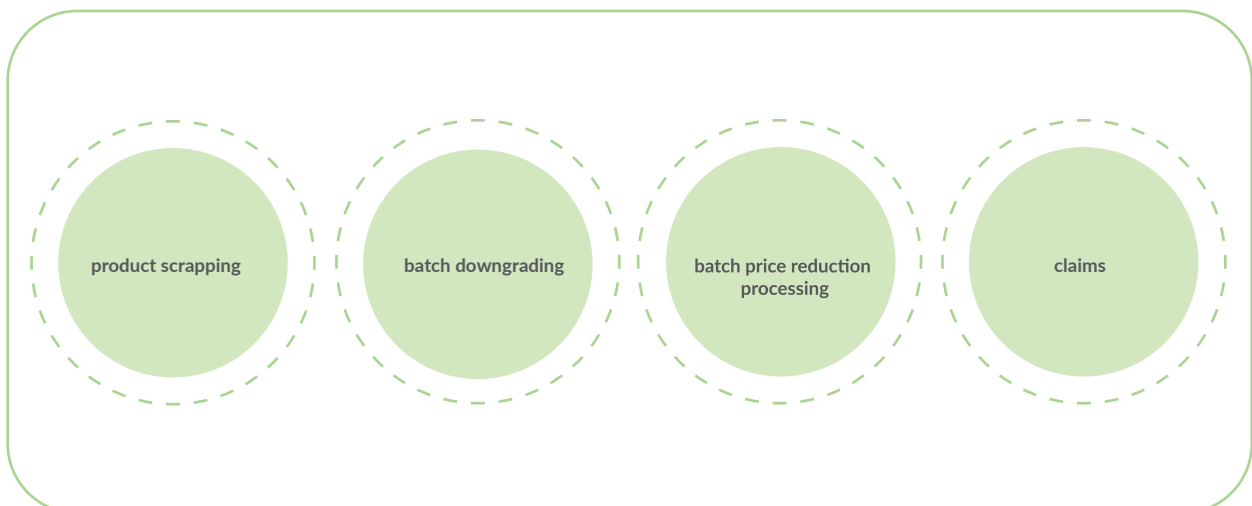
### Production Process Monitoring

The operators of the key process should perform the “three presses and three checks” in accordance with the requirements of the Production Operation Guideline before daily production runs and when production operations resume after the change or adjustment of the production conditions. After the output of the first product, the operator shall firstly conduct a self-inspection. Should the product be given a pass, the workshop team leader or workshop inspector should conduct a mutual inspection and confirmation. Mass production is allowed only after passing these inspections and shall be recorded in accordance with the requirements of inspection specifications.



### Product Quality Control

In case of product quality incidents such as product scrapping, batch downgrading, batch price reduction processing and claims, it is divided into five categories of general quality incidents, large quality incidents, serious quality incidents, major quality incidents and mega quality incidents according to the severity of one product loss caused by quality problems. The responsible personnel of the incident unit shall confirm, fill in the Quality Incident Report Form and report to the Quality Management Department of the company within 24 hours, and the incident responsible unit shall promptly conduct investigations, carry out quality incident analysis and form an analysis and investigation report.





## Unqualified Product Control

		Identification	Isolation	Determination/ Communication	Audit/ Review	Return to storage	Disposal
Raw materials	Incoming inspection non-conformance						
	In-service non-conformance						
	Inventory non-conformance						
	Finished product non-conformance resulting from identification	Traceability	Isolation	Reconfirmation of quality status			Processing and claims
Work-in-process	First piece inspection, spot inspection, patrol inspection, self-inspection, non-conformance after rework						
Semi-finished products	Self-inspection and sampling inspection non-conformance						
Finished products	Inspection, inventory, delivery, customer returns, etc.						

## Customer Service and Satisfaction

Yingli Solar has established Customer Satisfaction Measurement Control Procedures, providing the basis for improving the quality management system by collecting customer satisfaction information and measuring the performance of the quality management system.

In 2023, the company received a total of 2 after-sales complaint cases, with a 100% complaint resolution rate and complete customer satisfaction achieved. The comprehensive customer satisfaction score for 2023 was 95.07, meeting the set target of 90% and further improved compared with 2022.



complaint resolution rate



comprehensive customer satisfaction score

### Customer Satisfaction Survey

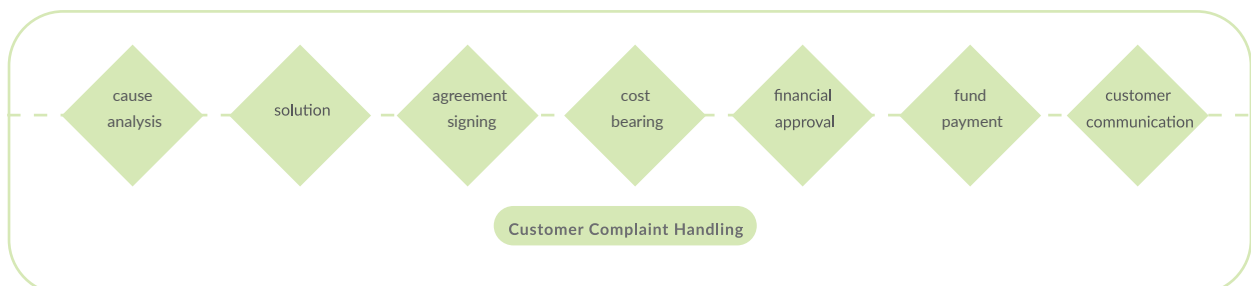
Detailed customer information (such as their name, address, and contact numbers) was recorded in the Customer Profile to facilitate timely communication with customers, understand their needs, and ensure customer satisfaction.

Yingli Solar regularly distributes customer satisfaction surveys to customers every year, investigating customer satisfaction in many areas such as product quality, price, packaging, sales consultation, and after-sales service. A statistical analysis of the survey results is then conducted and combined with information obtained from other channels to form the Customer Satisfaction Survey Results and Analysis Report.



### Customer Complaint Handling

Regarding general problems, the after-sales service team answers and records in detail correspondence from customers. Regarding customer complaint cases, the case manager identifies the whole processing process and related information of this complaint case by confirming the complaint code. The content of cause analysis, solution, agreement signing, cost bearing, financial approval, fund payment, customer communication, etc. shall be updated to the database timely to ensure that each step of decision is informed to the responsible personnel. Solutions offered to customers can include product returns, repairs, replacement, and compensation.





## Sustainable Supply Chain

### Supply Chain Management

For the sake of continuous improvement of product quality, effective control of suppliers' delivery capability and material level, and control of procurement risks, Yingli Solar has established the Supplier Management Procedures to ensure the objectivity, fairness and science of supplier selection. This also enables the company to reduce supply chain risks and improve supply chain resilience.

#### Supplier Profile Creation

Adopting the Supplier Capability Questionnaire, obtaining business license, production license, mandatory safety certification, quality management system certification, product certification or evaluation report, domestic and international award certificates, etc., the Company has established the supplier's basic information profile and conducted preliminary qualification screening of alternative suppliers.

Obtaining business license

Production license

Mandatory safety certification

Quality management system certification

Product certification or evaluation report

Domestic and international award certificates

#### Supplier Qualification Review

New material suppliers are required to produce trial batches in small quantities and undertake three kinds of supplier reviews after passing:



The qualification and certification review through the Supplier Capability Questionnaire for the record;



Market research through the network and other means, fill out the Supplier Capability Evaluation Form for evaluation;



The supplier factory inspection, for its quality management status, production equipment, delivery capacity, testing means, production site management, quality system management, environmental system management, occupational health and safety system management, social responsibility and other circumstances for on-site inspection, and the preparation of the Factory Inspection Report.



Suppliers provided business licenses, occupational health certifications, and other certificates to demonstrate compliance with relevant standards.



### Supplier Performance Evaluation

Yingli Solar's Bidding and Purchasing Department regularly conducts on-site inspections and evaluation of suppliers. This includes preparing Factory Inspection Reports, a review of their technical capability, inspecting the condition of their equipment, observing how they conduct quality control checks, evaluating their financial condition, and looking into their enterprise credit. Annual supplier evaluation meetings are held regularly every year to evaluate suppliers' delivery quantity, product quality, price, service quality, and to prepare the Qualified Suppliers Annual Re-evaluation Form and the Qualified Suppliers Annual Evaluation Form.

Enterprise culture	Technical capability	Equipment condition
Quality control	Financial and information condition	Production control capability
Enterprise credit	Safety	Illegal crimes

### Tiered Supplier Control

Levels Measures Taken	90 and above	80 - 89	70 - 79	60 - 69
Direction of Relationship Development	Strengthen cooperation, mutual support, strategic partnerships	Step up communication and exchange, and cultivate strategic partnerships	Notify suppliers to rectify and improve	Remove from the list of qualified suppliers
Priority Ranking	Priority is given to increasing supplier supply shares, new product development, payments, etc.	Increase procurement volume when price discounts exceed 5%.	Increase procurement volume when price discounts exceed 10% and quality is superior.	None
Procurement Volume	Increase	Determined according to actual needs	Determined according to actual production needs	Stop procurement

### Supplier Cancellation Standards

Supplier raw material technical standards that do not meet Yingli Solar's current production requirements will have their qualified supplier status revoked if, after technical exchange review, they still cannot be accepted. Non-compliant suppliers will be suspended from transactions, and may not be reinstated for a period of six months from the date of suspension. If reinstatement is required, they must undergo a new supplier development process.



## Supplier ESG Management

### Supplier Code of Conduct

Yingli Solar has established a Supplier Code of Conduct to clarify the behavioral requirements for suppliers in terms of compliance with laws, labour rights, environmental issues, health, and safety. Suppliers are required to comply with all applicable laws and regulations in their operating countries/regions, and are prohibited from violating local regulations regarding minimum working age and compulsory education age.

Suppliers must also be committed to continuously improving their environmental, health, and safety performance.

Suppliers should provide a safe and healthy working environment.

Suppliers should manage the operation of hazardous materials and equipment properly.

Suppliers should provide systems and training to help prevent accidents and injuries.

Suppliers should take appropriate measures to conserve resources and energy, and avoid waste.

Suppliers should dispose of and store hazardous materials and waste properly, and dispose of them safely and legally.

### Supplier SA8000 Commitment

Yingli has developed the SA8000 Management Manual based on the SA8000 Social Responsibility international standard and Chinese labour laws and regulations, combined with industry growth trends and the features of the company's strategy. Some suppliers have committed to comply with SA8000. These commitments include complying with laws and local regulations, prohibiting of the use of forced labour, prohibiting the use of child labour, prohibiting harassment or abuse of workers, complying with compensation and benefits regulations, prohibiting discrimination, complying with health and safety standards, protecting freedom of association and collective bargaining, and establishing a sound management system to ensure full compliance with the SA8000 standard.

The Company requires relevant suppliers to declare to Yingli Solar that they do not use conflict minerals. Suppliers are required to sign a pledge of integrity.

## Safeguarding the Rights and Interests of Employees

### Employment Management

Based on the SA8000:2014 standard, Yingli Solar has prepared a Social Responsibility Management Manual to enable the company to fulfill its social responsibility, maintain positive labour-management relations, and protect the basic rights and interests of employees.



Indicator		Unit	2023
Total number of employees		person	294
By contract type	Full-time employees	person	294
	Part-time employees	person	0
By age group	30 and below	%	23.86
	Above 30 to 50	%	73.60
	Over 50	%	2.54
By education level	Ph.D.	%	1.36
	Master's degree	%	5.10
	Bachelor's degree and below	%	93.54
Number of new employees	Number of newly hired female employees	person	28
	Number of newly hired male employees	person	68
	Number of newly hired fresh graduate employees	person	33
	Number of newly hired social recruitment employees	person	63



### Prohibition of Child Labor

Yingli Solar strictly implements the State Council Regulations on Prohibition of Child Labor, absolutely prohibits the use of child labour, and does not cooperate with suppliers or subcontractors who intentionally use child labour. Effective methods are used to identify the authentic age of employees upon onboarding to ensure that employees are at least 16 years old and to prevent mistakenly recruiting a child due to falsified documentations. As required by national regulations, Yingli arranges for staff to undergo a medical examination pre-employment and regular annual medical examinations thereafter.

Arrange for pre-employment and regular annual medical examinations

Shall not arrange for underage workers to perform any work that may be unsafe  
or dangerous to their physical or mental health and development



#### Prohibition of Discrimination

Yingli Solar prohibits any form of discrimination, including, but not limited to, discrimination on the basis of race, national or social origin, social class, ancestry, religion, physical disability, gender, sexual orientation, family responsibilities, marital status, union membership, political views, and age. The company uses the principles of fairness and equality in the formulation and implementation of policies regarding employment, wages, benefits, training, promotion, termination, and retirement. Any threatening, abusive, exploitative or sexual assault is prohibited; any form of discrimination against female workers, especially pregnant workers, is prohibited. Yingli Solar employees are encouraged to report any instances of discrimination to management.

#### Compensation and Benefit Policy

The salaries of Yingli Solar employees are in compliance with the Labor Law and follow the principle of labor distribution ("equal pay for equal work, more pay for more work, no pay for no work"). The company provides employees with benefits and allowances such as pension insurance, medical insurance, work injury insurance, maternity insurance, annual leave, night (mid) shift allowances, and transportation allowances. Yingli takes employees' needs as a starting point and carries out various employee care activities to fully motivate employees' passion, enrich their spare time, and enhance their sense of belonging and happiness.

#### Prohibition of Forced and Compulsory Labor

Yingli Solar respects employees' freedom rights, prohibits the use of any form of forced labor, and prohibits the use of any actions that restrict labour freedom. Employees have the right to leave the workplace after completing standard working hours and terminate their employment contract after giving reasonable notice to the company. Employment contracts and labour discipline drawn up by the company shall be agreed through consultation with workers' representatives and submitted to the local labour department for review and filing. Yingli rejects and does not support the acquisition of labour through human trafficking.



### Case: "New Youth, New Power" New Employee Team Building and Forum Event



Yingli Solar's Human Resources Department organised a team building and forum event ("New Youth, New Power") for new employees to help familiarise them with the company and foster teamwork.

## Employment Training & Development

Yingli Solar attaches great importance to employee training and development and carries this out in various forms such as internal lectures, external training, and practical exercises.

### New Employee Onboarding Training

#### Company-level onboarding

Organised and implemented by the Human Resources Department before new employees are assigned to their department.



The company-level onboarding mainly consists of indoor lectures, covering topics such as the company's rules and regulations, professional skills, employee literacy, and safety knowledge. The assessment includes two aspects: a paper examination and daily performance evaluation, forming the Comprehensive Assessment Form for New Employee Training. New employees are also asked to provide feedback by filling in the New Employee Training Effectiveness Questionnaire.

#### Department-level onboarding

Organised and implemented by each department.



The department-level onboarding covers department responsibilities, job responsibilities, work procedures, business knowledge and skills, etc. Each department organises its own assessment depending on the actual work content. The assessment results serve as the basis for new employee's regularisation and are reported to the Human Resources Department.





### Case: Setting Sail for Dreams, a Promising Future | Successful Conduct of New Graduate Employee Onboarding Ceremony



Group photo taken after the mentorship ceremony.



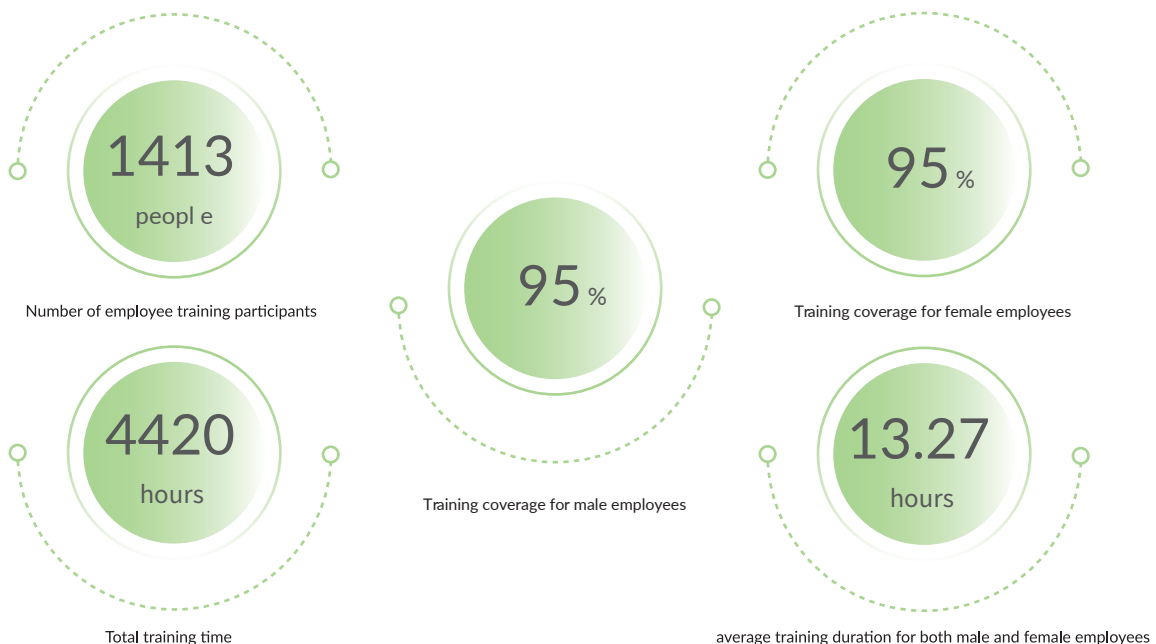
Mentors distributed work uniforms, ID badges, and other items to trainees.

On 4 July 2023, the New Graduate Employee Onboarding and Mentorship Ceremony was held. Over 30 new graduate employees were in attendance.

#### In-service Employee Training

Each department formulates an Annual Training Plan according to the annual target and key work, combined with the current situation of employees' ability. Training for in-service employees is divided into internal training and external training by training resources. Internal training refers to the training and learning activities conducted with internal resources; external training refers to the training, study tours, learning and exchange activities conducted with the help of external resources.

In 2023, Yingli Solar headquarters provided training to 1,413 participants, with a total training length of 4,420 hours. The training covered 95% male employees and female employees, with an average training duration of 13.27 hours for both male and female employees.





### Case: From Excellence to Outstanding Training Program



Training sessions

On 2 June, the first session of the Reboot Greater Brilliance Cadre Training Camp commenced. The two-day offline training covered the topics of communication and empowerment.



On 11 August, the second session of the Reboot for Greater Brilliance Cadre Training Camp commenced. The two-day offline training covered topics such as goal management, planning, and team management.



Trainees at the Taihang Water Town.

From 13-14 October, the third phase of the Company's Reboot for Greater Brilliance Cadre Training Camp (titled From Excellence to Outstanding: Employee Development and Effective Incentive Practices) was conducted. This was followed by a closing ceremony on 15 October.

### Backup Talent Management

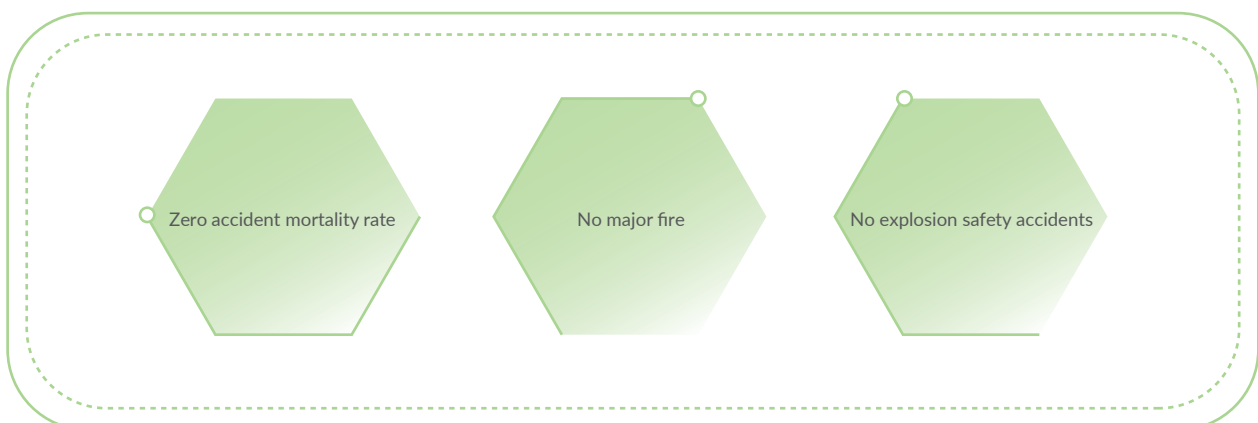
The selection of backup talents follows the principles of openness, justice, fairness, competition and merit, and is based on proper political thinking, business performance and actual contribution. The training of backup talents is mainly carried out through four channels:



### Occupational Health and Safety

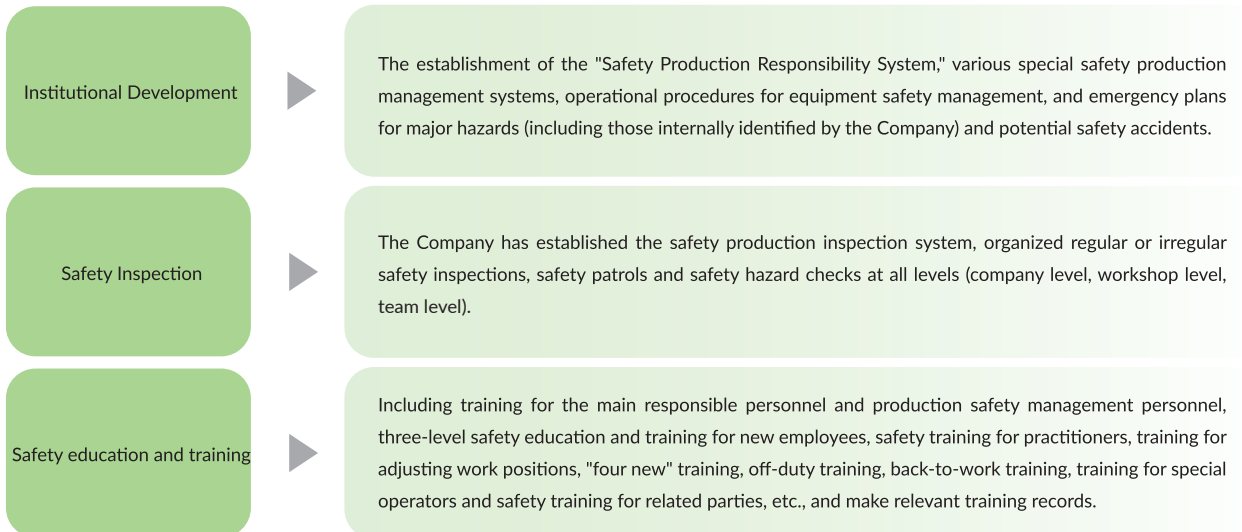
Yingli Solar has established safety management institutions in accordance with the requirements of relevant national regulations, hired professional safety management personnel, established a safety management network, and implemented various safety responsibilities. Yingli has also developed various safety management systems and operational procedures, conducted safety production supervision within the company, and supervised and inspected the implementation of various departments. Safety signs are prominently posted throughout Yingli's offices and factories.

The company's occupational health and safety management goal is to achieve a zero accident mortality rate, with no major fire or explosion safety incidents.





### Construction of Safety Production Management System



### Safety Production Management Requirements

Yingli Solar has formulated the Safety Production Checklist and various special safety checklists (including electrical, firefighting, and hazardous chemicals); established the Safety Hazard Investigation, Rectification and Treatment Ledger and the Hazard Identification Sheet and Major Hazard List; and conducts safety inspections. The company has also established the safety education and training management system, established the Safety Education and Training File for employees, and carried out safety education and training. The latter includes three-level safety education and training for new employees, safety training for practitioners, and training for adjusting work positions.

Fire Safety Management	Establishment of fire safety organisational structure and implementation of responsibility system. The headquarters and the bases are equipped with fire facilities, safety exits, and safety passages. Regular fire safety training and drills are conducted.
Special Operations and Special Equipment Management	Special operations are subject to a work permit system, and personnel must be certified and undergo training, re-evaluation, and certificate renewal as required. Periodic inspection and maintenance of special equipment in accordance with safety technical specifications, with records kept.
Hazardous Chemical Management	Review the qualifications of suppliers and manufacturers of hazardous chemicals and ask for safety technical instructions and safety labels. The transportation, storage, collection, use and waste disposal of chemicals shall comply with national laws and regulations.
Related Party Safety and Environmental Management	The company pushes for various suppliers, transporters, engineering contractors, waste handlers, and other relevant parties to comply with Yingli's EHS management requirements when conducting business.

### Occupational Health Management

The company has established a system for the prevention and treatment of occupational diseases, based on Yingli Solar's safety production management requirements. Each base has formulated documents such as the Occupational Disease Hazard Prevention and Control Responsibility System; Occupational Hazard Protection Facility Maintenance and Repair System; Regular Monitoring and Evaluation Management System for Occupational Hazards; Occupational Hazard Accident Handling and Reporting System; Workers' Occupational Health Monitoring and Archive Management System; Occupational Health and Safety; Labor Protection Control Procedures; and Environmental and Occupational Health and Safety Monitoring and Control Procedures. These have been designed to strengthen the identification and monitoring of occupational disease hazards, prevent and treat occupational diseases, inspections, and accident handling.

Occupational health and safety training before entering the Company	Inform employees of the various occupational hazard factors that may lead to the occurrence of occupational diseases and their consequences, necessary occupational hazard protection measures and related compensation.
Provide a healthy working environment	In the workplace, prominent signs and explanations are set up to display occupational health and safety regulations, operating procedures, emergency response measures for occupational hazards, and the results of occupational hazard factor detection.
Establish the management system for labour protection equipment	Issue labor protection equipment to employees in accordance with the relevant regulations, improve the configuration and obsolescence standards of labor protection equipment, and guide workers to properly use occupational disease protective equipment and personal protective equipment.
Physical examination for employees in occupational disease hazard positions	Regular training is conducted before and during employment to disseminate occupational health knowledge, ensure compliance with relevant laws and regulations, and improve the work flow of employee medical examinations. Employee occupational health monitoring files are established.

### Employee Communication and Activities

Yingli Solar respects and protects employees' rights to free association and collective bargaining, and protects employees' rights to freely form and join the trade union. The company has established a system of regular dialogue with employee representatives, arranging communication at least once every six months, and holding meetings when necessary.

Yingli encourages employees to participate in community construction, cares about community development and actively gives back to the society by organising employee volunteer activities. In 2023, the company organised a total of seven volunteer activities with 186 participants.











# GOVERNANCE

Effective Governance to Strengthen the  
Foundation of Corporate Development

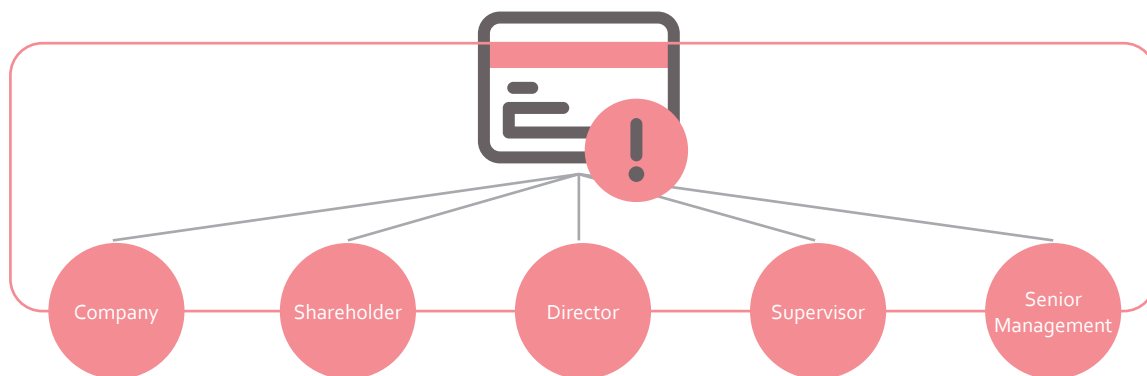




## Improving Corporate Governance

### Governance Architecture

In order to protect the legitimate rights and interests of the company, shareholders and creditors, and standardise the organisation and behavior of the company, in accordance with the company Law and relevant laws and regulations, Yingli Solar has formulated the Articles of Association of Yingli Energy Development Co., Ltd. as a document for legal restraint of the company, shareholders, directors, supervisors and senior management.



#### Shareholders' Meeting

The Shareholders' Meeting is the Company's decision-making body responsible for determining business policies, investment plans, personnel matters of directors and supervisors, and reviewing and approving board reports, supervisor reports, and company-related schemes.

#### The Board of Directors

The Board of Directors convenes the shareholders' meeting, reports to it, implements its resolutions, formulates company-related schemes, and appoints or dismisses senior executives. The Board of Directors consists of five directors, including one female director.

#### The Supervisor Board

The Supervisor Board inspects the Company's finances and supervises the behavior of directors and senior executives. The Supervisor Board consists of three supervisors, including one female supervisor and one employee representative supervisor.

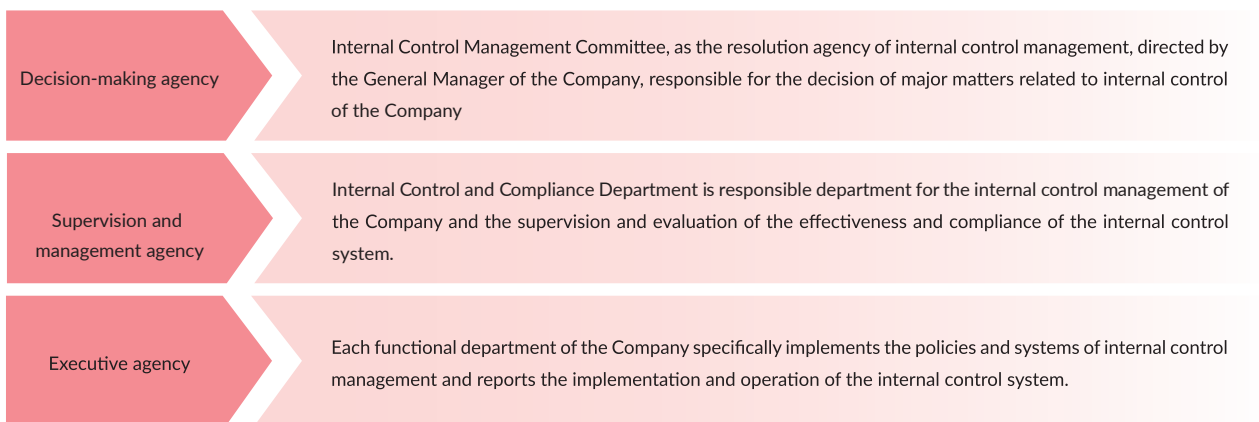
In 2023, Yingli Solar held two shareholder meetings and five board meetings.



## Strengthening Compliance and Risk Control

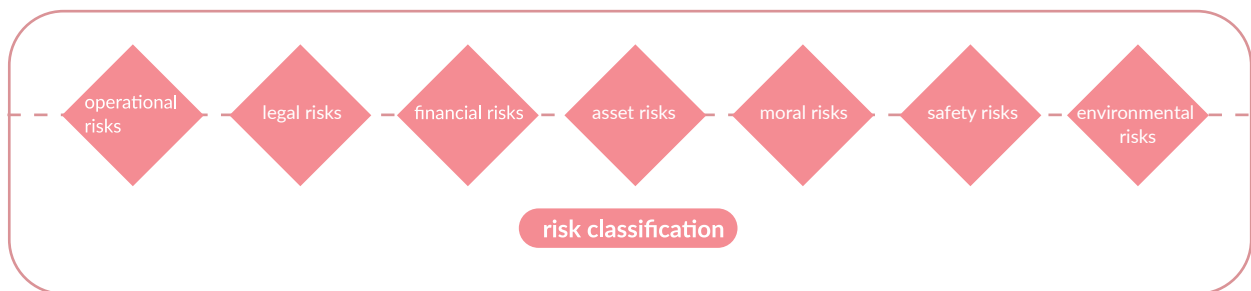
### Internal Control System

In order to improve the internal control management level, form the normal standardised management, and improve risk prevention capabilities, Yingli Solar has compiled the Internal Control Management Manual. This serves as the basis for establishing, implementing, evaluating, and verifying internal control of the company. The organisational structure of Yingli's internal control management system consists of three levels:

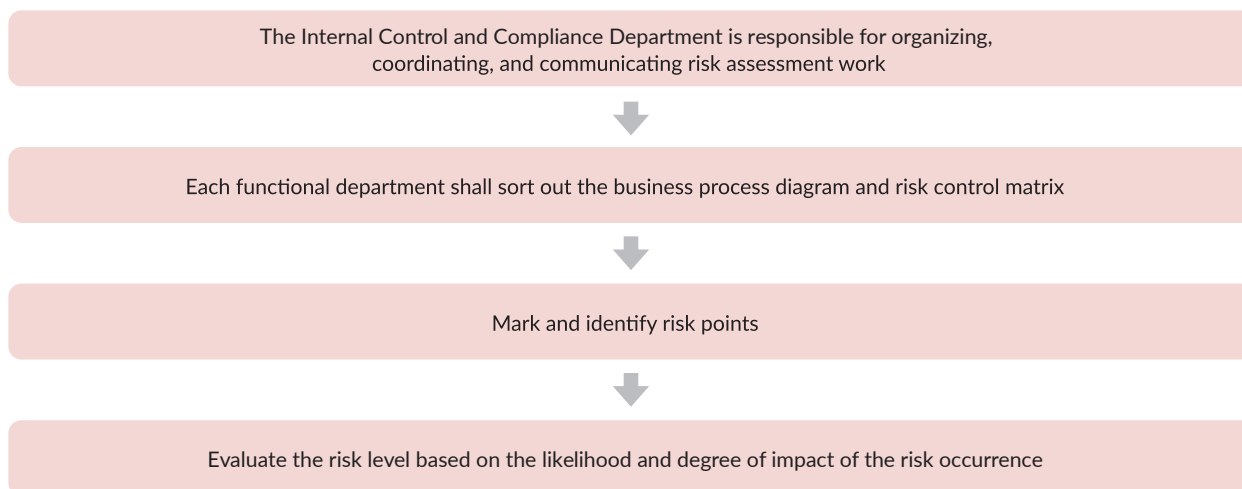


### Risk Identification

Combining the internal control objectives, actual business processes and internal and external risk factors, the Company classifies risks into seven categories: operational risks, legal risks, financial risks, asset risks, moral risks, safety risks and environmental risks.

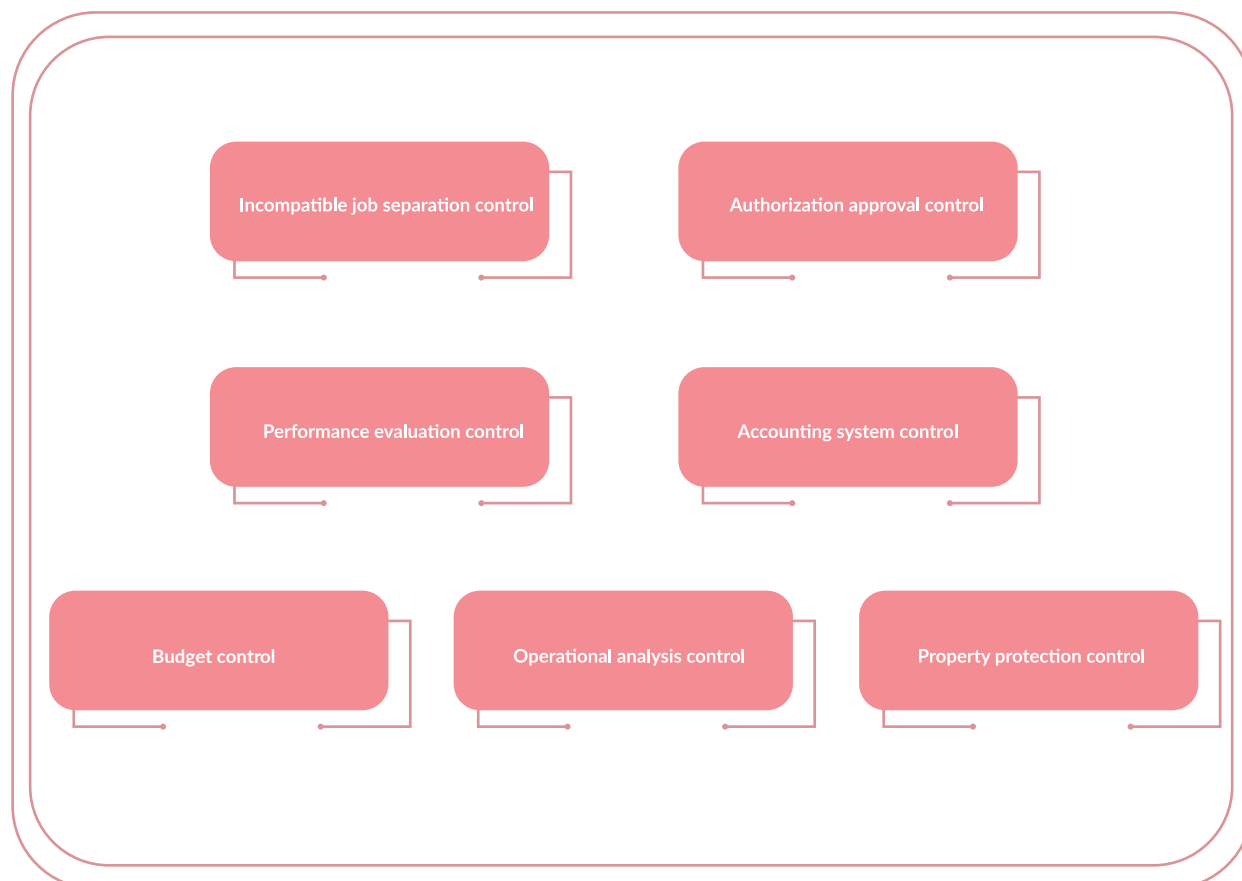


Yingli Solar carries out an annual risk assessment which is conducted by the company's Internal Control and Compliance Department. Each functional department sorts out the business process diagram and risk control matrix, marks and identifies risk points, and evaluates the risk level according to the possibility of risk occurrence and the degree of impact. The company adopts the qualitative analysis method to rate the identified risks according to the likelihood of occurrence of risks and the degree of impact, grading them into three levels: high, medium, and low. Yingli Solar focuses on the risk control of high-risk process nodes according to the rating results.



## Risk Control

Based on the results of the risk assessment, Yingli Solar uses the corresponding measures to control risks within a tolerable range through a combination of manual control, automatic control, preventive control, and discovery control. Specific forms include: incompatible separation of duties control, authorisation approval control, budget control, operation analysis control, performance appraisal control, accounting system control, and property protection control.



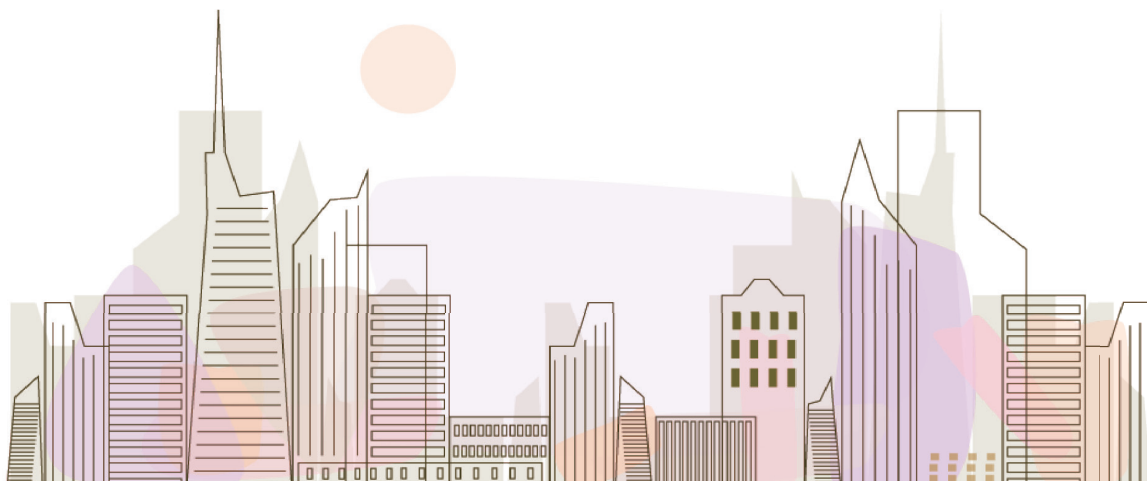




### Case: Internal Control Management Training at Yingli Energy Development Co., Ltd.



In order to enhance the learning of basic internal control knowledge across various departments of the company, improve the compliance of company management, and enhance overall work efficiency, the Internal Control and Compliance Department invited the Internal Control Management Project Team of Sci-Cur International to conduct training.





## Upholding Integrity in Business Practices

In order to better ensure the compliance operation and promote the construction of integrity and anti-corruption work, Yingli Solar has formulated the Discipline Inspection and Supervision Management System (Trial), with the Internal Control and Compliance Department as the main department responsible for performing disciplinary inspection and administrative supervision functions, through attending meetings, carrying out investigation and research, carrying out special supervision and inspection, etc., to assist the company to build clean governance and strengthen the construction of clean culture.

Set up various reporting approaches such as reporting mailboxes, reporting telephones, and online reports.



Regularly investigate and handle cases, and keep reporting channels open. The scope of reporting mainly includes violations of law and discipline such as internal corruption and bribery, malpractice, abuse of power for personal gain, abuse of power, embezzlement of position, etc., or dereliction of duty that cause greater losses to the Company's reputation and economy, as well as problems in the Company's atmosphere.

Establish a supervision mechanism for major matters



For significant incidents, emergencies, major disciplinary violations, and cases of illegal activities, as well as complaints, reports, accusations, appeals, and petitions received by the Internal Control and Compliance Department, timely reporting to the Company's Internal Control and Compliance Department is required.

Establish rules for honest professional conduct



Including 4 violations of decision-making procedures and regulations, 6 violations of personnel management regulations, 8 violations of financial management regulations, 9 violations of material procurement management regulations, 6 violations of contract management regulations, 6 violations of marketing management regulations, and 5 violations of material consumption management regulations.



### Case: Anti-Corruption and Integrity Awareness Education Activities











# OUTLOOK

In 2023, actively addressing climate change and adhering to the path of green development that promotes harmonious coexistence between humans and nature has become a global consensus. In the process of realisation of the global net zero goal, the photovoltaic industry will take on the irreplaceable role. From the initial renewable energy saving, to the intelligent, digital scale application, and now the continuous breakthrough of the intelligent energy industry, the construction of green supply chain system, the photovoltaic industry is embracing new development and change.

Faced with new challenges and opportunities, Yingli Solar will uphold its core values of “Trust, Delivery, Growth, and Sharing”, actively fulfilling its social responsibilities to employees, customers, supply chains, partners, and other stakeholders. It will leverage the critical role of the photovoltaic industry in addressing climate change, strengthen talent development to enhance employees’ professional qualities and skills, sincerely serve customers, and strive to achieve the coordinated development of the enterprise with society and the environment, rallying love to give back to society.

Looking ahead, Yingli Solar will adhere to a path of high-quality development that is intelligent, green, safe, and efficient, promoting the transformation and upgrading from energy conservation to intelligence and green energy. It will advance energy security construction and high-quality development, facilitate the green transformation of energy, and build a modern new energy system.





## Appendix 1: Key Performance Indicators

### Environment

Indicator	Unit	2023
Total water consumption	metric ton	14,283
Water consumption per person	metric ton/person	35.09
Water consumption per RMB 10,000 revenue	metric ton/RMB 10,000	0.0229
Consumption of outsourced electric power	ten thousand kWh	7,027
Consumption of photovoltaic power	ten thousand kWh	722
Gas consumption	m <sup>3</sup>	67,858
GHG emissions (Scope 1 & 2)	tCO <sub>2</sub> e	71,939
GHG emissions intensity (Scope 1 & 2)	tCO <sub>2</sub> e/MW	15.32

### Social

Indicator	Unit	2023
Total number of employees	person	294
Number of full-time employees	person	294
Number of part-time employees	person	0
Number of employees in China (mainland)	person	293
Number of employees in China (Hong Kong, Macao and Taiwan) and foreign countries	person	1
Ratio of employees aged 30 and below	%	23.86
Ratio of employees aged above 30 to 50	%	73.60
Ratio of employees aged over 50	%	2.54
Ratio of employees with Ph.D.	%	1.36
Ratio of employees with master's degree	%	5.10
Ratio of employees with bachelor's degree or below	%	93.54
Number of employees in sales and marketing	person	83
Number of employees in product R&D	person	108
Number of employees in customer service	person	44
Number of employees in administration	person	59
Number of newly hired female employees	person	28
Number of newly hired male employees	person	68
Number of newly hired fresh graduate employees	person	33
Number of newly hired social recruitment employees	person	63

Indicator	Unit	2023
Turnover rate of male employees	%	1.07
Turnover rate of female employees	%	1.02
Turnover rate of employees aged 30 and below	%	1.36
Turnover rate of employees aged above 30 to 50	%	1.36
Turnover rate of employees aged of 50	%	0
Average number of paid vacation days per year	day	10
Employment contract coverage	%	100
Employee satisfaction rate	%	98
Employee training coverage	%	95
Training coverage of male employees	%	95
Training coverage of female employees	%	95
Training coverage of senior management employees	%	100
Training coverage of middle management employees	%	100
Training coverage of primary employees	%	95
Total length of training in the year	hour	4,420
Number of suppliers in China (mainland)	-	53
Number of suppliers in North China	-	16
Number of suppliers in East China	-	29
Number of suppliers in South China	-	3
Number of suppliers in Central China	-	2
Number of suppliers in China (Hong Kong, Macao and Taiwan) and foreign countries	-	0
Number of supply chain risk events	-	0
Number of new product development projects in 2023	-	13
Number of patents applied in 2023	-	159
Number of patents authorized in 2023	-	92
Total number of patents authorised	-	140

## Governance

Indicator	Unit	2023
Meetings of Board Supervisors held	time	0
Average tenure of Board of Supervisors members	year	2
Number of directors in the Board of Directors	-	5
Board meetings held	time	6
Average tenure of Board of Directors members	year	2

## Appendix 2: Index of Indicators

### GRI Disclosure Index

GRI Disclosure Index	Item		Chapter
GRI 2: General Disclosures 2021	2-1	Organizational details	About this Report; About Us
	2-2	Entities included in the organization's sustainability reporting	
	2-3	Reporting period, frequency and contact point	
	2-6	Activities, value chain and other business relationships	About this report; About us
	2-7	Employees	Safeguarding Rights and Interests of Employees
	2-8	Workers who are not employees	Improving Corporate Governance
	2-9	Governance structure and composition	
	2-10	Nomination and selection of the highest governance body	
	2-11	Chair of the highest governance body	
	2-12	Role of the highest governance body in overseeing the management of impacts	
	2-13	Delegation of responsibility for managing impacts	
	2-14	Role of the highest governance body in sustainability reporting	ESG Governance Architecture
	2-15	Conflicts of interest	Stakeholder Engagement
	2-16	Communication of critical concerns	
	2-17	Collective knowledge of the highest governance body	ESG Governance Architecture
	2-18	Evaluation of the performance of the highest governance body	Improving Corporate Governance
	2-19	Remuneration policies	Safeguarding Rights and Interests of Employees
	2-20	Process to determine remuneration	
	2-27	Compliance with laws and regulations	Strengthening Compliance and Risk Control
	2-29	Approach to stakeholder engagement	Stakeholder Engagement

GRI Disclosure Index	Item		Chapter
GRI 3: Material Issues 2021	3-1	Process to determine material issues	Discussion on material issues
	3-2	List of material issues	
	3-3	Management of material issues	
GRI 205: Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	Upholding integrity in Business:\ Practices
	205-3	Confirmed incidents of corruption and actions taken	N/A
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Key Performance Indicators (KPIs)
	302-3	Energy intensity	
	302-4	Reduction of energy consumption	Advancing Green Transformation
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Strengthening Environmental Management
	303-2	Management of water discharge-related impacts	
	303-3	Water withdrawal	Key Performance Indicators (KPIs)
	303-4	Water discharge	
	303-5	Water consumption	
GRI 305: Emissions 2016	305-1	Direct GHG emissions (Scope 1)	Key Performance Indicators (KPIs)
	305-2	Indirect GHG emissions from purchased energy (Scope 2)	
	305-4	GHG emissions intensity	
	305-5	Reduction of GHG emissions	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	Strengthening Environmental Management
	306-2	Management of significant waste-related impacts	
	306-3	Waste generated	Key Performance Indicators (KPIs)
	306-4	Waste diverted from disposal	
	306-5	Waste directed to disposal	

GRI Disclosure Index	Item		Chapter
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Sustainable Supply Chain
	308-2	Negative environmental impacts in the supply chain and actions taken	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Safeguarding Rights and Interests of Employees
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	
	401-3	Parental leave	
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Safeguarding Rights and Interests of Employees
	403-2	Hazard identification, risk assessment, and incident investigation	
	403-3	Occupational health services	
	403-4	Worker participation, consultation, and communication on occupational health and safety	
	403-5	Worker training on occupational health and safety	
	403-6	Promotion of worker health	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
	403-8	Workers covered by an occupational health and safety management system	
	403-9	Work-related injuries	
	403-10	Work-related ill-health	
GRI 404: Training and Education 2016	404-1	Average hours of training per year	Key Performance Indicators (KPIs)
	404-2	Programs for upgrading employee skills and transition assistance programs	Safeguarding Rights and Interests of Employees
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Safeguarding Rights and Interests of Employees
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	Safeguarding Rights and Interests of Employees
GRI 408: Child Labour 2016	408-1	Operations and suppliers at significant risk for incidents of child labour	N/A
GRI 409: Forced or Compulsory Labour 2016	409-1	Operations and suppliers at significant risk for incidents of forced compulsory labour	N/A



GRI Disclosure Index	Item		Chapter
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	Sustainable Supply Chain
	414-2	Negative social impacts in the supply chain and actions taken	
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	Based on Quality Service
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	Based on Quality Service
	417-2	Incidents of non-compliance concerning product and service information and labeling	
	417-3	Incidents of non-compliance concerning marketing communications	
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Based on Quality Service




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