

(Incorporated in the Cayman Islands with limited liability) Stock Code: 00968

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## LEADING GREEN NEW ENERGY XINYI SOLAR

2024

Environmental, Social and Governance Report

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## About the Report

#### **OVERVIEW**

This report (the **"Report**") was the ninth environmental, social and governance (**"ESG**") report published by Xinyi Solar Holdings Limited (**"Xinyi Solar**", the **"Company**" or **"we**") and its subsidiaries (the **"Group**"), comprehensively reflecting the performance of the Company in ESG. This Report is an annual report, focusing on our efforts during the financial year from 1 January 2024 to 31 December 2024 (the **"Reporting Period**"). Some contents may be traced back to previous years or extended to 2029 (in terms of corporate sustainable development goals only). This Report should be read in conjunction with the **"**Corporate Governance Report" in the Company's 2024 Annual Report. This Report is published in Chinese and English, respectively, and is available for downloading on the website of the Company(www.xinyisolar.com) and the website of the Hong Kong Stock Exchange (www.hkexnews.hk). In case of any discrepancy between different language versions, the Chinese version shall prevail.

#### **REPORTING SCOPE**

The Report covered the Company and its wholly-owned and non-wholly-owned subsidiaries located in the Mainland China, Hong Kong, Malaysia and Canada and their core businesses, which include: (i) production and sales of solar glass; (ii) solar farm business. The coverage is the same as the Company's 2024 Annual Report. The economic and employee-related data included the Company's wholly-owned subsidiary in Indonesia and a 52%-owned non-wholly owned subsidiary in Yunnan Province, the PRC. However, as the above projects were still under construction or have not commenced production as of 31 December 2024, the resource consumption and waste emissions were very limited. Therefore, its environmental data during the Reporting Period has not been covered, and the inclusion of the relevant data will be considered in accordance with the magnitude of the impact of such data on the environmental performance of the Group as a whole.

#### **REPORTING PRINCIPLES**

The environmental and social key performance indicators ("**KPIs**") have been compiled with reference to the Reporting Guidance on Environmental KPIs and the Reporting Guidance on Social KPIs of the Hong Kong Stock Exchange, respectively. We selected the scope of disclosure and collect data based on the principles of materiality, relevancy and applicability via a systematic materiality assessment procedure combining internal and external opinions, and calculated according to the parameters applicable to the Group's industry and geographical location of operations. The standards, methods, assumptions and/or references of calculation adopted for the relevant KPIs and the sources of the major conversion parameters have been properly explained.

The Report follows the principle of balance and respects objective facts. It provides an unbiased and sufficient disclosure of the Group's performance in ESG aspects. All ESG-related events that should be disclosed and have/potentially have a significant impact on the Group are disclosed in the corresponding sections of this Report.

In the Report, unless especially specified, the performance data of all non-wholly owned subsidiaries are reported on a 100% basis without adjusting in proportion to the equity interests held by the Company. Unless otherwise stated, all currency units involved are Renminbi. KPIs in different periods are calculated and disclosed in a consistent manner to ensure comparability, and any changes in the calculation and disclosure methodology have been explained in the relevant disclosure notes.

## About the Report

#### **REPORTING FRAMEWORK**

The Report prepared in accordance with the mandatory disclosure requirements and the "comply or explain" provision in the Environmental, Social and Governance Reporting Guide (the "**ESG Reporting Guide**"), Appendix C2 to the Listing Rules on the Stock Exchange of Hong Kong Limited (the "**Hong Kong Stock Exchange**"). Meanwhile, the Report has also made reference to other international and industry disclosure standards on sustainable development reporting to further enhance the level of disclosure and enrich the content, including the "Sustainability Reporting Guidelines" of the Global Reporting Initiative (GRI standards), the recommendations from the "Sustainability Accounting Standards for the Solar Technology & Project Developers Industry" issued by the Sustainability Accounting Standards Board (SASB) of the United States, and key topics of concern to mainstream ESG rating agencies in the PRC or overseas.

With regard to the disclosure of identification, response and management of risks and opportunities brought by climate change, the Group has further optimised and improved the level of the disclosure on climate information in the Report by taking into account the recommendations of the Task Force on Climate-related Financial Disclosures ("**TCFD**") and based on the communications with different key stakeholder groups during the Reporting Period, including the Hong Kong Stock Exchange, the Carbon Disclosure Project (the "**CDP**"), the Hong Kong Quality Assurance Agency, Institutional Shareholders and ESG analysts.

#### FORWARD-LOOKING STATEMENTS

The Report contains forward-looking statements, which are projections and assumptions based on the current state of the Group's business and the industry and market in which the Group operates, and are not guarantees of future performance. The Group's performance may be affected by market risks, uncertainties and factors beyond the Group's control. Hence, the actual result may differ from the assumptions and related statements made in the Report.

#### **REVIEW AND APPROVAL**

The Report has been reviewed by the Sustainable Development Management Committee ("**SDM Committee**") and was published on 30 April 2025 after the approval by the Board of Directors of the Company (the "**Board**").

#### **CONTACT AND INQUIRY**

The Group attaches great importance to the opinions and feedback of stakeholders, and on this basis, continuously improves the Group's ESG performance and disclosure. If you have any comments and feedback on the Report and the Group's ESG strategy, please feel free to contact the Group through the following means:

#### Xinyi Solar Holdings Limited

#### **Investor Relations Department**

Address: Units 2109-2115, 21/F, Rykadan Capital Tower, No. 135 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong Tel: +852 3919 2888 Fax: +852 3919 2813 Email: <u>ir@xinyisolar.com</u> Website: www.xinyisolar.com

## **Board Statement**

THE BOARD IS COMMITTED TO MAINTAINING A HIGH LEVEL OF AWARENESS, MONITORING AND ACTIVELY PROMOTE THE GROUP'S SUSTAINABLE DEVELOPMENT CONCEPT IN ALL ASPECTS OF STRATEGIC PLANNING, PRODUCTION AND OPERATION, VALUE CHAIN AND COMMUNITY ENGAGEMENT. THE BOARD WILL CONTINUE TO PLACE SPECIFIC ISSUES SUCH AS ENHANCING BUSINESS RESILIENCE TO COPE WITH CLIMATE CHANGE, ADHERING TO THE CONCEPT OF SUSTAINABLE DEVELOPMENT TO ENSURE THE RESTORATION OF GREEN EARTH BY GREEN BUSINESS, IMPLEMENTING SUSTAINABLE TALENT MANAGEMENT, AND PARTICIPATING IN THE SUSTAINABLE VALUE CHAIN AND THE CONSTRUCTION OF COMMUNITY AT THE CORE OF OUR SUSTAINABILITY GOVERNANCE, SO AS TO CREATE LONG-TERM VALUE FOR STAKEHOLDERS.

The Board is the highest governance body of the Group's ESG matters. It implements comprehensive and effective supervision on various ESG management work, including examining, assessing and regularly reviewing our ESG strategies, material ESG-related (including climate-related) opportunities and risks, ESG-related goals and core indicators, overseeing the formulation and implementation of ESG-related internal policies, the work of the Sustainable Development Management Committee, the progress of sustainable development goals, the annual performance of core indicators, ESG information disclosure, etc. The SDM Committee is authorised by the Board to coordinate and manage ESG-related matters, and reports to the Board on a regular basis to ensure that the Board is aware of the Group's progress and performance in ESG and is subject to the supervision of the Board. The SDM Committee was established in 2021. It is directly led by the chief executive officer of the Group, with members including the heads of major divisions. For more detailed disclosure, please refer to the section headed "Governance for Sustainability" in the Report.

As a world's leading solar glass manufacturer and a leading private solar farm operator in China, the Group's business development is of great significance to the global promotion of energy transition and the realisation of carbon neutrality. In its own operation, adhering to the strategy of "Two enhancements and one reduction", the Group actively enhances the solar glass production capacity and installed capacity of solar farms, and effectively reduces the energy consumption and emissions per unit of solar glass production, so as to maximise the positive impact and reduce the negative impact on the society and the environment. In addition, the Group hopes to convey the concept of "GREEN" to the value chain and community through its own participation and promotion, so as to contribute to the creation of a green and sustainable future. The Group's ESG strategy covers five key areas:

- Governance for Sustainability
- Resilience to Climate Change

- Ecological-friendly and Sustainable Business Model
- Engaging with the Value Chain and Community
- Nurturing talents for long-term development

## **Board Statement**

Feedback and suggestions from different stakeholder groups on the Group's ESG work and disclosure are important to the Group's continuous progress in ESG governance. We attach great importance to the communication with key stakeholder groups. During our daily operations and before the preparation of the ESG Report, we have obtained the opinions of key stakeholders through different channels to help us identify material ESG issues that are closely related to the Group and prioritise those issues. When reviewing the materiality assessment results, the Board has fully considered the changes in the internal and external environment related to the operation and development of the Group's core business, as well as the ESG governance standards and disclosure requirements issued by the Hong Kong Stock Exchange and other international organisations, and regularly reviewed material ESG issues to ensure the monitoring of material ESG issues. The Board has also fully considered the impact of ESG-related risks and opportunities in the process of operation management, strategic planning and decision-making.

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Based on the Group's core business nature, business model and impact analysis on the value chain, we have proposed 15 Sustainable Development Goals ("**XSGs**") and long-term action plans, six of which are quantitative goals, mainly related to Goal 13 (Climate Action), Goal 12 (Responsible Consumption and Production) and Goal 7 (Affordable and Clean Energy) in the 17 United Nations' Sustainable Development Goals ("**SDGs**"). All quantitative Sustainable Development Goals are refined into annual targets and implemented after review by the SDM Committee. The progress of relevant goals is tracked on a quarterly basis and supervised by the SDM Committee and the Board. The Board would regularly review the relevant goals with regard to their progress, feedback from stakeholders and changes in the internal and external environment as the basis for the adjustment of existing goals and the setting of new goals. Our current 15 Sustainable Development Goals and long-term action plans fully reflect the Group's ESG strategy in key areas of our focus, and are an effective way to maximise the positive and minimise the negative impacts of the Group's contribution to the SDGs and the value chain based on the current actual operating environment and feasible technologies.

The Board will make every effort to fulfil its responsibilities and actively promote ESG issues in five key areas to achieve higher standards of governance level and facilitate the achievement of sustainable development for enterprises, value chains and society.

## Message from our Chairman and CEO

2024 marked the 20th anniversary of the United Nations Global Compact (UNGC) formally introducing the Ten Principles of the Global Compact and the concept of Environmental, Social and Governance (ESG). With the growing importance of sustainability and environmental protection, ESG has gradually become an important force in guiding sustainable transformation and promoting sustainable development.

It is Xinyi Solar's responsibility and mission to guide the industry's green manufacturing transformation, promote the industry's sustainable development, and contribute to the global carbon neutrality goal. As a leader in the solar glass industry, Xinyi Solar has firmly committed to the operating concept of "Green and sustainable development", while implementing the ESG strategy of "Two enhancements and one reduction" as well as the "Green" strategy. Xinyi Solar is committed to improving the environmental performance of our own business, focusing on improving business resilience in response to climate change and work together with employees, value chain and society to move towards a sustainable future.

Despite the complex and volatile external environment in 2024, the Group is optimistic about its progress towards the established sustainability development goals. In terms of environmental protection, in 2024, the density of greenhouse gas emissions per unit of finished product of Xinyi Solar's solar glass decreased by 8.4%, the density of energy consumption per unit of finished product decreased by 8.8%, and the density of water consumption per unit of finished product decreased by 14.7%, thus completing the targets of XSG 1 for greenhouse gas emissions and XSG 4 for energy consumption ahead of schedule. In addition, the Group completed the carbon footprint assessment for its mainstream solar glass products on measuring carbon emissions from the production stage up to the point of sale, which complied with the verification standards ISO 14064-3:2019 and ISO 14067:2018, and obtained the carbon footprint certification for the products. In terms of society, Xinyi Solar actively performed its commitment to the "Ten Principles" and integrate the Ten Principles into the Group's strategy and policy formulation, cultural construction and promotion as well as daily operations to ensure that Xinyi Solar not only practises and advocates the spirit of the Global Compact in its own operations, but also in the value chain and community engagement.

We are pleased that Xinyi Solar's ESG efforts have been recognised by international and local authorities and have become a driving force for our continuous improvement and progress. Xinyi Solar has been recognised by Corporate Knights, a Canadian media and investment research firm, as one of the "Global 100 Most Sustainable Corporations" for four consecutive years. We were honoured with the "Best ESG Performance Award - Mid-Cap" and the "Best ESG Reporting Award - Mid-Cap" in the Sixth BDO Environmental, Social and Governance Awards 2024. Xinyi Solar is also a constituent of a number of ESG indices of MSCI ("**MSCI**"), Hang Seng ("**HSI**") and FTSE in the UK. Meanwhile, Xinyi Solar has outperformed its peers in a number of international and local sustainability ratings, including CDP, Standard & Poor's ("**S&P**"), MSCI, Institutional Shareholder Services group of companies ("**ISS**") and HSI.

## Message from our Chairman and CEO

In our journey towards sustainability, we will continuously adhere to our mission of "Leading Green New Energy", actively promote ESG practices, seize the development opportunities in the solar industry, and contribute more to the global green energy transformation through the sustainable and high-quality development of our solar glass and solar power business.

Dr. LEE Yin Yee, S.B.S. Chairman and Non-executive Director 30 April 2025 LEE Shing Put, B.B.S. Vice Chairman, Executive Director and Chief Executive Officer



## 2024 Sustainability Highlights

### **Climate Resilience**

- Increased solar glass production capacity: the commencement of production of new production lines with capacity of 4,400 tonnes/day, total daily melting capacity increased to 32,200 tonnes/day. With a capacity of 23,200 tonnes/day in operation
- The solar glass sold during the Reporting Period can meet the requirements of approximately 169GW modules. The green electricity generated by these modules per year is equivalent to a reduction of CO<sub>2</sub> emissions of 118 million tonnes
- Newly installed solar farm capacity of 300MW, with total approved connected capacity exceeding 6.2GW
- Annual total electricity generation of the solar farm amounted to 6.39 billion kWh, equivalent to a reduction of CO<sub>2</sub> emissions of 5.245 million tonnes

### Sustainable Business Model

- Intensity of energy consumption decreased by 8.8%, XSG 4 (energy consumption intensity target) completed
- Intensity of water consumption decreased by 14.7%, XSG 7 (water consumption intensity target) progress achieved
- Water recycling rate was 96.3%, XSG 6 progress achieved
- 86.9% of domestic sales used iron pallets, XSG 8 progress achieved
- Intensity of greenhouse gas emissions decreased by 8.4%, XSG 1 (carbon intensity target) completed
- CO<sub>2</sub> emissions reduction from the power generation of the solar farms increased by 44.1%, XSG 2 (carbon emission reduction target) progress achieved
- Reduction in NO<sub>x</sub>, SO<sub>2</sub> and particulates emissions increased to 93.9%, 85.6% and 96.8% respectively

## ENVIRONMENT

### Employee

- Provide decent, fair and safe working environment for 9,645 employees
- Zero work-related death cases
- Work-related injury rate: 0.69
- Each employee received an average of 12.1 hours of occupational skills and personal skills training
- Provided education fund of RMB600,000 for employees' children

#### Community

- Donated money and materials with a total value of RMB6.262 million to help rural revitalisation, poverty alleviation, flood control, disaster relief and medical assistance
- Xinyi Hong Kong Volunteer Team participated in multiple community volunteer activities during the year to raise funds for social welfare organisations and care for disadvantaged groups
- Nearly 64% solar farms are agricultural-PV and fishery-PV solar farms, which increased the income of local fishermen and farmers

## SOCIAL

- Committed to enhancing the positive impact and reducing the negative impact of the Group in areas related to SDG 7, SDG 8, SDG 9, SDG 12 and SDG 13. During the Reporting Period, all activities related to the Group's production operations and value chain management were consistent with the SDGs
- Obtained the Product Carbon Footprint certification

## GOVERNANCE

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Xinyi Solar is the world's leading solar glass manufacturer and listed on the Main Board of the Hong Kong Stock Exchange on 12 December 2013 (stock code: 00968.HK). The Group specialises in the research and development, manufacturing, sales and aftersales services of solar glass. Major products include ultra-clear patterned solar glass (raw and tempered), anti-reflective coating solar glass and back glass. The Group provides diversified, high-quality and low-carbon solar glass products for major PV module manufacturers in the world. As of 31 December 2024, the Group had five major solar glass production bases, which are located in Wuhu of Anhui Province, Zhangjiagang of Jiangsu Province, Beihai of Guangxi Zhuang Autonomous Region, Tianjin Municipality, the PRC and Malacca in Malaysia, respectively, with a total daily melting capacity of 32,200 tonnes and of which 23,200 tonnes was in operation.

Solar power is one of the key paths in the global energy transition and the realisation of climate goals. Solar glass is an indispensable component of PV modules. Therefore, the promotion of climate action will put forward higher requirements and greater advance for solar glass, including production capacity, product quality and technological innovation. The Group will continue to search for suitable locations in the PRC and overseas and adjust the construction time and production plan of new production capacity according to market trends.

Adhering to the management philosophy of "Green and sustainable development", the Group strictly enforces the "5G" principles of Green Procurement, Green Production, Green Product, Green Packaging and Green Partner in solar glass production and business operation to establish and continuously improve an eco-friendly and sustainable business model, and unremittingly pursue a greener production method. The Group adopts energy conservation and emission reduction measures in all aspects of production and operations to effectively reduce emissions caused by the consumption of energy, water resources and raw materials during the production process. In addition, through continuous investment in research and development, the Group has launched new products to provide the market with low-carbon solar glass products with higher performance that can meet the needs of different PV modules and application scenarios, so as to support the PV industry chain to continuously reduce costs, increase efficiency and enhance competitiveness with practical actions. At the same time, as a leading enterprise in the solar glass segment, the Group actively promotes the green development of the entire life cycle of the PV industry chain through its own efforts and participation in the value chain.

Based on the current furnace technology and cost efficiency consideration, solar glass production still needs to rely on fossil energy as the main fuel for production. Therefore, it is still impossible to completely avoid greenhouse gas emissions during the production process of solar glass without achieving a further breakthrough in furnace technology or more mature and costeffective carbon capture technology. In order to improve the positive impact on the environment, since 2012, the Group has installed distributed PV power system on the rooftops of solar glass production plants, so as to reduce the amount of purchased electricity and the indirect greenhouse gas emissions. In 2014, the Group extended its business to the solar farm segment and directly participated in the process of global energy transition and carbon neutrality by supplying green electricity to the society. As of 31 December 2024, the total installed capacity of the solar farms held by the Group amounted to 6,244 megawatt ("**MW**")<sup>Note1</sup>, including 5,841MW utility-scale solar farm projects and 403MW distributed projects, making the Group the largest utility-scale private solar farm owner and operator in China. During the Reporting Period, the Group's solar farm projects generated a total of approximately 6.39 billion kWh of electricity, resulting in 5,245,000 tonnes of CO<sub>2</sub> emission reduction, equivalent to 78.8% of the greenhouse gas emissions from the Group's solar glass production in the same period.

Following the successful spin-off of Xinyi Energy Holdings Limited ("**Xinyi Energy**") (stock code: 03868.HK) in 2019, the Group has continued to engage in the business of development and construction of solar farms, while the business of the operation and management of solar farms is vested in Xinyi Energy, which is 51.62% owned by the Group as of 31 December 2024. The Group has optimised the recycle of capital by adopting the "build-sell-hold via Xinyi Energy" model to achieve continuous growth in installed capacity. As of 31 December 2024, the Group had 4,511MW concentrated solar farm projects held through Xinyi Energy.

The core value of "Strive for continuous self-improvement and treating the world well" has always been upheld by Xinyi Solar. In addition to pursuing higher economic and environmental benefits in its own business, the Group is always mindful of its corporate responsibility to our employees, the value chain, the society and the earth, develops and optimises strategies in the overall interests of the community and key stakeholders, and to take effective action to bring benefits to a wider range of stakeholder groups in a wider context.



#### **Roles and Responsibilities Global citizen Industry leader** • Always keep in mind the corporate mission and vision, we maintain the Respond with practical actions to the United Nations SDGs and the Ten Principles of the Global Compact. We are committed to increasing leading position in terms of economic efficiency, production technology, positive impacts and reducing negative impacts on the five SDGs product development and environmental benefits advancements, which are most relevant and influential to the Group: actively promote the sustainable development of its own business, and quide and assist the value chain to achieve efficient, low-carbon and sustainable development through ethical business cooperation Establish a sustainable supply chain, pay attention to the climate resilience, environmental and social benefits of the supply chain, and • Comply with, support and implement the ten basic principles of strictly supervise the ESG-related performance of suppliers through human rights, labour standards, environment and anti-corruption in effective mechanisms, especially to ensure compliance with the all aspects of strategic planning, operational management, business principles related to human rights protection, occupational safety and development and business cooperation health, environment, integrity and honest operations Adopt an aggressive capacity expansion strategy to support global • Through production development and energy saving and consumption climate action. During the Reporting Period, the Group's capital expenditure was RMB4,705 million, 100% invested in climate change

 Imough production development and energy saving and consumption reduction, we focus on product life cycle management and carbon footprint reduction to meet customer demand for green and lowcarbon products. During the Reporting Period, the energy consumption intensity, water consumption intensity and greenhouse gas emission intensity of solar glass products decreased by 8.8%, 14.7% and 8.4% respectively

Employer

### > Corporate citizen

mitigation activities

- Adhering to the core value of "Treating the world well", the Group actively gives back to society by increasing its tax contribution, creating job opportunities and enthusiastically helping the poor and disadvantaged. Meanwhile, we make good use of our business expertise to help communities improve climate resilience, including improving the ecological environment through the construction, development and operation of solar farms, supplying green electricity, and increasing the income of farmers; building distributed PV power generation projects for urban rail systems; and making PV greenhouses and power stations open to public for visit to promote eco-tourism and popularise knowledge about PV power generation
- During the Reporting Period, the Group made income tax contributions of RMB526.2 million and charity donations of RMB6.262 million
- As of 31 December 2024, the Group held 6.2GW of ground-mounted solar farm projects, nearly 64% of which were fishery-PV/agricultural-PV complementary, which can increase income and profit for fishermen/farmers
- Establish and continuously improve employment-related supervision, management and feedback mechanisms to ensure that employment matters are legal and compliant. We follow the principles related to the labour standards of Global Compact, protect the legitimate rights and interests of employees, listen to and respond to employees' demands in a timely manner, and pay attention to occupational safety and health management to provide employees with an equal, diverse, inclusive and safe working environment
- Emphasise talent cultivation and human capital development, formulate appropriate talent reserves and step-wise talent training programmes, attract talents who share the same concept, provide platforms, opportunities and career development paths, and strive to become a trustworthy and caring employer for the growth of our employee
- During the Reporting Period, the Group reserved university talent resources for business development through "Hundred Talents Scheme". As of 31 December 2024, the Group had a total of 9,645 employees located in mainland China, Hong Kong, Malaysia, Indonesia and Canada

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#### **CORPORATE GOVERNANCE**

The Company has adopted the Corporate Governance Code ("**CG Code**") as set out in Appendix C1 of the Listing Rules of the Hong Kong Stock Exchange during the Reporting Period. The Company's 2024 Corporate Governance Report has been published in the Company's 2024 Annual Report. It is recommended to be read in conjunction with the contents of this section.

#### Philosophy

The Group upholds the "STRC" (Systematic, Transparent, Reliable and Considerate) concept in corporate governance, strictly complies with the CG Code as set out in Appendix C1 of the Listing Rules, and actively refers to and adopts the local/international best practices recommended by the Hong Kong Stock Exchange for continuous improvement in governance.



#### **COMPOSITION OF THE BOARD**

During the Reporting Period, the Board of Xinyi Solar comprised nine members, including four executive directors, two non-executive directors and three independent non-executive directors. We agree that a diversified board of directors can accommodate and make full use of a wide range of skills, experience, background and professional knowledge, which can help companies improve their governance capabilities and make governance decisions more insightful and reasonable. There is one female member in the Board and the proportion of female director is 11.1%.

The Group's corporate governance structure and scope of duties have not been adjusted during the Reporting Period:



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	LEE Yin Yee	TUNG Ching Sai I	LEE Shing Put	LEE Yau Ching	LI Man Yin	CHU Charn Fai	LO Wan Sing, Vincent	KAN E-ting, Martin	LEONG Chong Peng
	Chairman and Non- Executive Director	Vice Chairman and Non- Executive Director	Vice Chairman And Executive Director	Executive Director	Executive Director	Executive Director	Independent Non- Executive Director	Independent Non- Executive Director	Independent Non- Executive Director
Audit Committee							Member	Member	Chairperson
Nomination Committee	Chairman	Member					Member	Member	Member
Remuneration Committee	Member	Member					Chairman	Member	Member
Board tenure (year)	13	13	11	13	11	2	11	11	2
Age	72	59	47	49	70	55	77	42	51
Gender	М	Μ	М	М	М	Μ	М	М	F
			Govern	ance Guidelines	Criteria				
Independence							$\checkmark$	$\checkmark$	$\checkmark$
Senior management experience Note 1	V	$\checkmark$	$\checkmark$	$\checkmark$	√	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Industry experience Note 2	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			
Financial experience Note 3						$\checkmark$			$\checkmark$
Board experience Note 4	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$
Other public company board member	√	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		
Other public company CEO		$\checkmark$							
			Ex	perience and Ski	lls				
Industry experience - Solar Glass									
Manufacturing and supply	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$				
Marketing and management			$\checkmark$	$\checkmark$		$\checkmark$			
Industry experience - Solar Farm									
Construction and development		$\checkmark$	$\checkmark$	$\checkmark$					
Mergers and acquisitions		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$			
International exposure Note 5								$\checkmark$	$\checkmark$
Legal expertise								$\checkmark$	
Digital and technology			$\checkmark$					$\checkmark$	
Compliance and corporate governance	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

#### Notes:

- 1. Experience as president, chief executive officer or in similar senior management positions
- 2. Experience in industrial manufacturing, glass manufacturing, solar PV, power generation, transportation or basic materials industries
- 3. Expertise in accounting, auditing, tax or investments
- 4. Prior or current service on other listed company boards
- 5. Seniority in a global enterprise or significant experience in international markets

### **INDEPENDENCE OF DIRECTORS**

The Board of the Company highly values the practice of excellent corporate governance and is committed to aligning with the best international practices and maintaining consistency. The Company clearly distinguishes between the management of the Board of Directors and routine business management, which are respectively under the charge of the Chairman and the President, to ensure a balance of power and authority. The chairman of the Company, as a non-executive director, is responsible for managing and leading the Board to ensure that the Group maintains strong and effective corporate governance practices and procedures. The chief executive officer is responsible for daily management and operation of the Group's business, including closely monitoring the Group's operating and financial results with the assistance of other members of the Board and other senior management, taking necessary actions to enhance operational efficiency, and formulating future business plans and strategies for the approval by the Board.

The Board of the Company has a robust mechanism for ensuring board independence, and the mechanism can effectively facilitate the performance of its duties:

- The Board of the Company has clear requirements regarding the number and independence of independent directors. The Board of the Company has four executive directors and five non-executive directors (including independent non-executive directors). Non-executive directors accounted for 55.6% of the board membership;
- The Board of Directors of the Company invites independent directors to serve as chairpersons or members of various committees of the Board. All members of the Audit Committee of the Company are independent non-executive directors. The Remuneration Committee of the Company is chaired by an independent non-executive director, and all members are composed of non-executive directors. The Nomination Committee of the Company is chaired by Dr. LEE Yin Yee, S.B.S., the Chairman of the Board and a non-executive director, and a majority of its seats are taken up by independent non-executive directors;
- The independence of the independent non-executive directors is confirmed annually in accordance with the established procedures and Rule 3.13 of the Listing Rules. All the independent non-executive directors of the Company are not involved in the daily management of the Group's business, have no business dealings with the Group or any connection with other directors, substantial shareholders and chief executive officer of the Company, and do not hold, directly or indirectly, any issued shares of the Group as well as any share options granted by the Company.
- The continuing connected transactions have been submitted to the Board for approval. In the course of voting on the resolutions, the directors that might have conflicts of interest were required to abstain from voting on the relevant resolutions. The connected transactions went through the annual review conducted by the independent non-executive directors and reported to the Board. During the Reporting Period, all independent non-executive directors of the Company have reviewed the continuing connected transactions during the Reporting Period and confirmed that these transactions were conducted in accordance with the relevant agreements governed by them, the terms of which are fair and reasonable and in the interests of the shareholders of the Company as a whole.

### **DETERMINATION OF DIRECTORS' REMUNERATION**

The remuneration committee has been established under the Board of the Company, which is primarily responsible for reviewing the remuneration packages of directors and senior management and making recommendations on share options scheme to the Board.

The remuneration of the Group's executive directors is determined on the basis of their experience, responsibilities, workload and time contributed to the Group. In accordance with the agreements entered into with the directors, the remuneration comprises fees, annual salaries, discretionary bonuses, allowances and benefits in kind (including housing allowances and share options, if any) and contributions to pension schemes. Discretionary bonuses are determined based on the Group's operating results, individual performance (including but not limited to the key business performance of their responsible scopes and the core indicators of other areas in relation to the long-term development of the Company, such as environmental, social, etc.) and comparable market data for each financial year within the executive directors' tenure at a maximum of 5% of the Group's total net profit for such financial year. None of the substantial shareholders or executive directors related to the substantial shareholders have been granted any share options of the Company.

The remuneration of the Group's non-executive directors and independent non-executive directors are determined in accordance with the duties and responsibilities of these directors and independent non-executive directors respectively and their agreements with the Company. Pursuant to the relevant agreements, they only received director's fees paid by the Group, received no other non-cash benefits, and were not granted any share options by the Company.

During the Reporting Period, Dr. LEE Yin Yee, S.B.S., the chairman of the Board and a non-executive director of the Group, and Tan Sri Datuk TUNG Ching Sai *J.P.*, a non-executive director, waived their annual director's fee of RMB544,000 in total. Details of the remuneration, benefits and interests of each of the directors during the Reporting Period are set out in Note 9 to the consolidated financial statements in the Company's 2024 Annual Report.



### **INTERNAL CONTROL AND RISK MANAGEMENT**

#### Internal Control and Risk Corporate Structure

Xinyi Solar has established a company-wide risk governance structure to ensure that risk management is implemented in all aspects of the Company's operations and to safeguard the stable development of the Company's businesses. At the same time, we have also taken into account the business independence of our risk governance structure to ensure that risks are controlled from an objective and holistic perspective.



Xinyi Solar encourages all employees, including senior management and department heads, to participate in the risk management process. At the same time, we incorporate Key Performance Indicators (KPIs) related to risk management, such as compliance management, occupational health and safety, and human rights, into our performance evaluation to ensure the effectiveness of risk management.

#### Internal Controls and Risk Management Process

Information collection	Risk identification	Risk assessment	Risk response	Improvement supervision
Collection of risk cases, external industry change risks, policy documents, process deficiencies, complaint reporting	Identify risk categories and determine the department responsible for response	Risks are assessed in terms of probability of occurrence, legal consequences, business impact and other dimensions, and risk levels will be classified.	Develop appropriate risk response plans for each level of risk and escalate matters with a high level of risk	Implement the approved programme, follow up on its implementation, and assess and review the results of corrective actions
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The internal audit team has conducted a review and internal audit on the risk control of the solar glass and solar farm businesses in 2024. As of 31 December 2024, based on the internal review results and assessment of the results by the Audit Committee, no material deficiencies were found in risk management and internal control systems. Risks, opportunities and actions taken by the Group related to climate change were separately disclosed in the "Resilience to Climate Change" section of this Report.



### **BOARD DIVERSITY**

The Group recognises that a diversified board of directors is conducive to achieving balanced and sustainable development of the Group, which can help to achieve established strategic goals and ensure that the Group maintains its leading industry position. Members of the Board have industry and/or professional backgrounds that are critical to the development of the Company's core business, ranging from solar glass manufacturing and sales, solar farm development and construction, mergers and acquisitions, finance, law, digital technology, compliance and corporate governance, and have an international perspective.

### **Gender distribution of directors**





## Stakeholder Engagement

### STAKEHOLDERS IDENTIFICATION AND COMMUNICATION

The needs and interests of key stakeholders are an important starting point for the Group to formulate and optimise its sustainable development strategy. The opinions and concerns of key stakeholders are also an important source of motivation for Xinyi Solar to keep moving on the sustainable development path and continuously improving ESG disclosure. The Group identifies key stakeholders based on the principle of relevance, influence, degree of dependency and proximity through the "Stakeholders Influence –Dependency Matrix", and provide a variety of convenient, flexible and reassuring communication channels based on the characteristics and habits of different stakeholder groups. Regular and timely communication helps the Group to actively listen to and refer to their opinions on material ESG issues, ESG governance, actions and measures taken, which is the basis for timely response to their concerns and assessment of the effectiveness of our existing ESG strategies, identification of deficiencies and optimisation and replenishment.

There were no significant changes in the nature of the Group's core business during the Reporting Period, and therefore the key Stakeholders identified including governments and regulators, shareholders/potential investors, employees, suppliers/business partners, customers, communities and the public, are same as the previous years.

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Key Stakeholders	Major Communication Channels	Issues of Concern
Governments and regulators	<ul> <li>Phone call/meeting</li> <li>Site visit</li> <li>Online real-time monitoring system</li> <li>Compliance report</li> </ul>	<ul> <li>Corporate governance and business ethics</li> <li>Environmental governance and protection</li> <li>Community contribution and participation</li> <li>Production management and product responsibility</li> <li>Talent team building and management</li> <li>Business model (sustainable, flexible) and innovation</li> </ul>
Shareholders/ Potential investors	<ul> <li>Annual general meeting</li> <li>Circular and announcement</li> <li>Annual/interim financial report</li> <li>ESG report</li> <li>Investor conference and roadshow</li> <li>On-site visit and inspection</li> <li>Press release/company website/social media platform</li> <li>Telephone/e-mail inquiry</li> <li>Instant chat/online communication APPs</li> <li>Questionnaire and feedback</li> </ul>	<ul> <li>Corporate governance and business ethics</li> <li>Business model (sustainable, flexible) and innovation</li> <li>Value chain development</li> <li>Environmental governance and protection</li> <li>Production management and product responsibility</li> </ul>

## Stakeholder Engagement

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Key Stakeholders	Major Communication Channels	Issues of Concern
Employees	<ul> <li>Regular department/group meeting</li> <li>Performance appraisal</li> <li>Training and employee activity</li> <li>Employees' satisfaction survey</li> <li>Interview/employee opinion box</li> <li>CEO's mailbox</li> <li>Questionnaire and feedback</li> <li>Internal publication</li> </ul>	<ul> <li>Environmental governance and protection</li> <li>Production management and product responsibility</li> <li>Talent team building and management</li> <li>Corporate governance and business ethics</li> <li>Value chain development</li> </ul>
Suppliers/ Business partners	<ul> <li>Product procurement/project tendering</li> <li>Cooperation plan/site visit</li> <li>Qualification certification and regular review on suppliers</li> <li>Phone call/e-mail/meeting</li> <li>Social media platform</li> <li>Questionnaire and feedback</li> </ul>	<ul> <li>Value chain development</li> <li>Corporate governance and business ethics</li> <li>Business model (sustainable, flexible) and innovation</li> <li>Production management and product responsibility</li> </ul>
☆☆☆ <u> ○</u> ○ Customers	<ul> <li>Site visits</li> <li>Telephone/interview</li> <li>Questionnaires and feedback</li> <li>Publications/other promotional leaflets</li> <li>News reports/official website</li> <li>Social media platforms</li> </ul>	<ul> <li>Value chain development</li> <li>Production management and product responsibility</li> <li>Corporate governance and business ethics</li> <li>Business model (sustainable, flexible) and innovation</li> <li>Environmental governance and protection</li> </ul>
Communities	<ul> <li>Environmental assessment</li> <li>Coordination meeting</li> <li>Charitable activities</li> <li>Press release/official website</li> <li>Corporate public account</li> <li>Phone call/visit</li> </ul>	<ul> <li>Community participation</li> <li>Environmental governance and protection</li> <li>Business model (Sustainable, flexible) and innovation</li> <li>Production management and product responsibility</li> </ul>



#### **DOUBLE MATERIALITY ASSESSMENT**

Xinyi Solar attaches great importance to the identification and management of materiality issues. In order to ensure that the issues covered in the Group's annual ESG report are in line with the industry/region/internationally recognised best reporting practices, and to keep abreast of the new challenges and opportunities brought by changes in the external environment (economic, social, policy and industry) to the Group's ESG governance issues, and to fully respond to the concerns and demands of key internal and external stakeholders, the Group strictly follows an internationally recommended standardised process of "identification, prioritisation and verification" for materiality assessment.

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1. Identification	<ul> <li>(1) Based on the Group's industry background, business operations and ESG governance status, development needs in the changing external environment, and the focus of peers/value chains, review and evaluate the results of the materiality assessment of the previous financial year and make adjustments to relevant issues</li> <li>(2) Take into account megatrends, international/local best practice recommendations and requirements from ESG rating agencies: <ul> <li>(i) the SASB Materiality Map and the Accounting Standard for Sustainable Development of Solar Energy Technology and Project Development Industry;</li> <li>(ii) Global Risks Report 2024 by the WEF;</li> <li>(iii) the Hong Kong Stock Exchange's Materiality table – by Industry and aspect;</li> <li>(iv) MSCI ESG Industry Materiality Map; and</li> <li>(v) CDP Climate Change Questionnaire and Water Security Questionnaire</li> </ul> </li> <li>(3) The relevant issues identified can be divided into seven areas: corporate governance and business ethics, environment governance and protection, business model (sustainable, flexible) and innovation (including climate risk and opportunity response), production management and product responsibility, value chain development, community participation, and talent team building and management</li> </ul>
2. Prioritisation	<ol> <li>Internal review on the impact of the relevant issues on our business operation and financial value</li> <li>Communicated with key internal and external stakeholders (including day-to-day communications and the Xinyi Solar 2024 ESG Materiality Identification Survey Questionnaire) to understand how the key stakeholders assess the impact that the relevant issues may have on the groups to which they belong, the environment and society</li> <li>Present the double materiality assessment results through materiality matrix</li> </ol>
3. Verification	The results of the double materiality assessment are submitted to the SDM Committee. After review and verification by the SDM Committee, material issues are finalised and reported to the Board, and disclosed as key points in the annual ESG report

## Stakeholder Engagement

During the Reporting Period, based on the results of the previous year's stakeholder questionnaire survey and issue materiality assessment, the Company made adjustments in terms of the issues' impact on business and stakeholders by taking into account the policies and regulations involved in the business, issue risk analyses, ESG best practices of peer companies and expert opinions. During the Reporting Period, through issue identification, the substantive issue of "International labour and participation in human rights initiatives" was deleted, and "Charity work", "Economic benefits (taxation, employment)", "Community relations building and maintenance" and "Education and publicity" were merged into "Community contribution and participation".

The double materiality matrix below presents the relative importance of 41 relevant issues in the seven areas of most concern to internal and external stakeholders based on the materiality to business (Y-axis) and impact on stakeholders (X-axis) of the issues. In particular, the assessment of materiality to business takes into account the vulnerability, resilience and continuity of the impact, with greater emphasis on internal assessment and the views of internal stakeholders, while the assessment of materiality to stakeholders takes into account the likelihood of occurrence, the scope of impact and the significance of the impact, with an emphasis on the views of external stakeholders.



#### **Issues of focus**

- Law-abiding business
- Anti-corruption and integrity management
- Business ethics
- Governance structure ÷
- Board diversity
- Information disclosure and transparency



The sustainable development that the Group firmly pursues is development that takes into account social, environmental and economic benefits. It is based on good corporate governance, effective risk management and ethical business operations. Through its unremitting persistence and practice, the Group explores sustainable development paths applicable to core businesses, implements the sustainable development policy in its own business scope, and actively responds to the United Nations Sustainable Development Goals and the call of the Ten Principles of the Global Compact. We aim to promote and support the sustainable development of the value chain, society and the world through ethical business practices.

#### SUSTAINABLE DEVELOPMENT APPROACH

Law-abiding is the foundation of business. The Group strictly abides by the laws and regulations of the countries and regions where it operates, and has established a "Three-in-One" corporate standardised management system in accordance with Quality Management System (ISO9001:2015), Environmental Management System (ISO14001:2015) and Occupational Health and Safety Management System (ISO45001:2018) and obtained relevant certifications to ensure that the Group's management model and monitoring mechanism for product quality and safety, environmental protection and pollution prevention as well as occupational safety and health are in line with international standards.

Xinyi Solar Group's "Integrated Management Manual" has set standardised procedures and standards for production management, product safety and quality supervision, environmental protection and pollution prevention, resource management and efficient utilisation, production safety and occupational health, and has established an effective supervision and feedback mechanism. During the Reporting Period, the Group carried out relevant work in accordance with established standards and internal procedures and was supervised by the Board and/or other dedicated committees to ensure that the Group's business operations were legal and compliant. Appropriate actions were taken to fully protect the rights and interests of key stakeholders such as employees, customers, suppliers and communities.

The Group attaches great importance to fulfilling its corporate social responsibility and responds with practical actions to the United Nations Sustainable Development Goals and the Ten Principles of the Global Compact. The Group deeply integrates the concept of sustainable development into all aspects of long-term development planning, business operations and business cooperation. Leveraging on actively drawing on local/international best practices to continuously improve its corporate actions, the Group is well-prepared for a sustainable future by identifying, effectively mitigating/avoiding ESG-related risks at an early stage and seizing development opportunities.





#### **RESPONSE TO UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGS)**

As the world's leading producer of solar glass, Xinyi Solar works with the PV industry chain to reduce costs and increase efficiency, making PV power generation more cost effective and enabling large-scale application in a wider region around the world, thus ensuring that more people have access to affordable, reliable, sustainable and modern energy. In addition, we actively participate in actions to promote global energy transition and carbon neutrality, build climate resilience and respond to climate change by investing in utility-scale solar farm projects. Our utility-scale solar farm project holding ranked first among private enterprises in China. The PV power generation process does not involve the consumption of energy and water, and even taking into account the power consumption in the operation and maintenance process, the carbon emission intensity is less than 1% of that of traditional coal-fired power generation. Therefore, by providing society with green electricity, non-renewable resources (such as fossil energy), water resources, atmospheric environment, water environment, ecological environment and ecological diversity are protected to a great extent. In addition to investing in renewable energy and expanding the scale of its core business, the Group is also committed to responding to the call of the United Nations Sustainable Development Goals in its operation and production process, taking all feasible measures to perform responsible consumption and production, reducing the carbon footprint of the full life cycle of solar glass products and other negative impacts on the environment, while providing decent work for employees and promoting local economic growth.

We conduct SDGs impact analysis on the value chain every year to evaluate the impact of our operations and development on the realisation of different Sustainable Development Goals, and take active actions to maximise the positive impact and minimise the negative impact based on the relevant evaluation results. We not only strictly implement sustainable development principles in our own operations, but also share our sustainable development philosophy with stakeholder groups through principle-based value chain cooperation and community participation, so as to call on them to take collective actions to support the broader United Nations Sustainable Development Goals.

According to the SDGs impact analysis of the value chain during the Reporting Period and based on MSCI's recommendations, the Group has selected five SDGs which are closely related to its business operations and value chain and on which the Group can make an impact. Ranked according to the scope of its impact on the Group's value chain and the Group's influence on relevant SDGs, the order is "Combat Climate Change" (SDG 13), "Responsible Consumption and Production" (SDG 12), "Affordable and Clean Energy" (SDG 7), "Decent Work and Economic Growth" (SDG 8) and "Industry, Innovation and Infrastructure" (SDG 9).



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SDGs	Impact areas of the value chain	Specific actions
13 EVENT         Example         Take urgent action to combat climate change and its impacts		<ul> <li>Identify climate risks and key strategies as response to improve the ability to address climate risks.</li> <li>Actively adopt energy saving and consumption reduction measures to reduce greenhouse gas emissions in the production process</li> <li>Reduce the greenhouse gas emission intensity of transportation by increasing the use of waterways for transportation</li> <li>During the Reporting Period, the solar glass sold could supply approximately 169GW modules, and the green electricity generated by these modules each year can bring about 118 million tonnes of carbon dioxide emission reduction for the planet</li> <li>Held more than 6.2GW of solar farm projects. During the Reporting Year, the PV power generation exceeded 6.39 billion kWh, which can meet the annual electricity demand of nearly 2.13 million households</li> </ul>
12 RESPONSIBIL DANA PRODUCTION COOD Ensure sustainable consumption and production patterns		<ul> <li>Promote cleaner production and manufacturing by optimising energy structure, exploring energy-saving potentials and enhancing intelligent control</li> <li>Establish supply chain ESG management system and promote further standardisation and systematisation of ESG management for suppliers</li> <li>Decrease the energy consumption intensity, water consumption intensity and packaging material usage intensity per square metre of the Group's solar glass products, and improved the efficiency of denitrification, desulfurisation and dust removal in the Group's solar glass production process</li> </ul>
7 ATORIDABLE AND         7 CLEM REMOT         ••••••••••••••••••••••••••••••••••••		<ul> <li>Increase and develop solar glass production capacity and reduce the cost of solar glass per watt of modules, thereby reducing the construction cost of solar farm projects</li> <li>The increasing number of solar farms connected to the grid continues to provide more green power to society</li> <li>Use of residual heat generation and distributed photovoltaic power generation to replace part of the purchased electricity demand in the solar glass production process, increasing the proportion of renewable energy use</li> </ul>





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#### Xinyi Solar Sustainable Development Goals (XSG)

As a member of the PV industry, the Group has been sparing no effort to promote the global application of PV power generation to gradually reduce the proportion of traditional energy power generation, so as to promote the green and low-carbon transition of global energy, and support the climate actions and achievement of related sustainable development goals. At the same time, in terms of production operation and value chain cooperation, we have also further enhanced the positive impact in other influential SDGs areas by formulating and actively practising quantitative sustainable development goals and sustainable development principles, and avoided/reduced the negative impact as much as possible to support the achievement of relevant SDGs. Based on the results of the SDGs Impact Analysis of the value chain, the Group has proposed corresponding corporate sustainable development goals, including five-year quantifiable goals and long-term action goals.

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v	Xinyi Solar Sustainable Development Goals (XSG)	Progress in 2024
13 CLIMATE	XSG 1: Intensity of greenhouse gas emission of solar glass products in 2027 ↓ 15% Note1; if excluding the impact of differences in the proportion of thin glass output ↓ 7.0% Note2	<ul> <li>Greenhouse gas emissions per unit of product of the Group decreased by 19.8% compared to the base period (2022)</li> <li>Excluding the impact of differences in the proportion of thin glass output in different years, the Group's greenhouse gas emissions per unit decreased by 11.2% compared to the base period (2022)</li> <li>The target has been achieved ahead of schedule in 2024, so new target is set as follows: New XSG 1: Achieve a reduction of 9% in greenhouse gas emissions (Scope 1+2) intensity per square metre of finished solar glass product by 2029 as compared to 2024</li> </ul>
	XSG 2: Increase investment in renewable energy and strive to reduce carbon dioxide emissions corresponding to the annual power generation of the solar farm projects held by the Group in 2027 1 50%	• The annual carbon dioxide emissions reduction increased by 44.1% as compared with the base period (2022)
	XSG 3: Supporting most countries around the world to achieve carbon neutrality by 2050 by increasing solar glass production capacity and scale of solar farm projects	<ul> <li>The Group added 4,400 tonnes/day of solar glass production capacity, and the effective annual melting capacity increased by 15.7%.</li> <li>The Group's solar farm projects generated 6.39 billion kWh of electricity, equivalent to a reduction of greenhouse gas emission of approximately 5.245 million tonnes</li> <li>The greenhouse gas emission reduction from the annual power generation of the Group's solar farms projects was equivalent to 78.6%</li> </ul>



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	Xinyi Solar Sustainable Development Goals (XSG)	Progress in 2024
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	XSG 4: Strive to reduce energy consumption per square metre of finished solar glass product by 2027 ↓ 13% <sup>Note 1</sup>	<ul> <li>The intensity of energy consumption reduced by 16.5% as compared to the base period (2022)</li> <li>The target was completed ahead of schedule in 2024, so new target is set as follows: NEW XSG 4: Strive to reduce energy consumption per square metre of finished solar glass products by 9% by 2029 as compared with 2024</li> </ul>
	XSG 5: Adopt strict standards to regulate and manage the emissions of exhaust gas, and strive to surpass national standards	Desulphurisation efficiency, denitrification efficiency and dust removal efficiency increased to 85.6 %, 93.9% and 96.8%, respectively
	XSG 6: Obtaining and use water resources in a responsible and sustainable manner to further improve the utilisation rate of recycled water and strive to achieve zero waste except normal evaporation and sedimentation tank loss	The water recycling rate was 96.3%
	XSG 7: To strive for a 28% reduction in water consumption per square metre of solar glass products by 2028 as compared to 2023	The intensity of water consumption decreased by 14.7% year-on-year
	XSG 8: By 2028, 92% of domestically sold products will use iron pallet instead of wooden pallet	The utilisation rate of iron pallet for domestic sales products was 86.9%
	XSG 9: Conduct procurement in a responsible and sustainable manner and regulate supplier behaviour through quality, environmental protection and safety protocols	Purchased from a total of 3,959 suppliers, 100% of which were qualified suppliers that comply with the Group's supplier development and management practices
	XSG 10: Reduce the non-hazardous waste and improve the recycling rate and processing efficiency of non- hazardous waste to reduce environmental pollution and ecological damage. The target is to reduce glass powder per square metre of finished solar glass products by 35% by 2028 as compared to 2023	<ul> <li>The glass powder per square metre of finished solar glass products was 51.12 g/m<sup>2</sup></li> <li>Updating the target to cover a wider range: NEW XSG 10:To reduce waste generation except for temporary increases due to incidental factors (such as the construction of new production bases or new production lines leading to an increase in construction waste), the target is to maintain a downward trend in the unit hazardous and non-waste generation intensity of solar glass products in the next five years by reducing material consumption, strengthening recycling and utilisation, and improving the yield of finished products</li> </ul>

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	Xinyi Solar Sustainable Development Goals (XSG)	Progress in 2024
8 RECENT WORK AND ECONOMIC GROWTH	XSG 11: Protect the health and safety of employees with an ultimate goal of zero harm	<ul> <li>Work-related injury rate was 0.69</li> <li>No work-related death cases</li> </ul>
	XSG 12: Promote the development of mutual prosperity for the community and make positive contributions to the economy, environment and public welfare	<ul> <li>Generated direct economic value of RMB21.96 billion</li> <li>Contributed economic value of RMB21.38 billion to community and upstream value chain, including charitable donations of RMB6.262 million</li> </ul>
7 AFFORDABLE AND CLANE DIRECT	XSG 13: Protect local natural resources and biodiversity while developing and building solar farms, and insist on building environmentally friendly solar farms	<ul> <li>Among the 300MW grid-connected capacity newly added, all of them were developed and constructed in an environmentally friendly manner</li> </ul>
9 NULSTRY INNOVATION AND INFRASTRUCTURE	XSG 14: Promote the optimisation and upgrading of solar glass production technology and products through continuous research and development investment, so as to help PV power generation to achieve cost reduction and efficiency improvement, and promote local sustainable industrial development through the launch of more efficient and environmentally friendly solar glass production lines to increase the contribution of green industries to local taxation	<ul> <li>During the Reporting Period, four new solar glass production lines were added, R&amp;D expenses amounted to RMB600 million, and the tax contribution of solar glass business was RMB78.55 million</li> </ul>
	XSG 15: Select, design and develop solar farm projects with full consideration of the impact of climate factors to enhance the project's climate risk resilience, so as to ensure a more stable supply of green electricity to meet the demand of the community	• During the Reporting Period, the loss of electricity due to natural risk factors accounted for less than 0.02% of the total power generation

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Notes:

- (1) Compared to the base period (2022)
- (2) If the below method is used (so as to eliminate the impact caused by the different proportion of thin glass production output in different years), the target is to achieve a close to 7.0% reduction in greenhouse gas emissions per unit of product by 2027
  - i) Calendering process: Use the actual product output (in tonnage) to calculate the greenhouse gas emissions per tonne of output, and then multiply it by the tonnage/area conversion factor in the base period to get the greenhouse gas emissions per square metre of output
  - ii) Deep processing: Use the actual product output (in square metre) to calculate the greenhouse gas emissions per square metre of output

#### SUSTAINABLE DEVELOPMENT GOVERNANCE STRUCTURE

The Group has established its own sustainable development governance structure based on the internal and external development environment, ESG governance status and long-term goals, the requirements of regulatory authorities, systems and laws, and actively refers to industry and international best practices for improvement to ensure that the Group's established sustainable development approach and various important sustainable development issues are included in the Company's agenda and are effectively supervised to ensure their implementation.

As the highest governance body of the Group's sustainable development matters, the Board implements comprehensive supervision on the performance of management responsibilities in various aspects of environmental, social and corporate governance, so as to ensure the top-down transmission of sustainable development strategies and concepts and implement them in business decisions at all levels. The Group's sustainable development governance structure has not been adjusted during the Reporting Period. As the co-ordinating body at the daily management level, the SDM Committee manages various practices in environmental, social and climate-related areas under the authorisation and supervision of the Board and leads the implementation of sustainable development goals.


### Sustainable Development Governance Structure of Xinyi Solar





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ESG structure	ESG responsibilities
Board	<ol> <li>Formulating, regularly reviewing and optimising the Group's sustainable development strategy;</li> <li>Monitoring the SDM Committee and ensuring its effective operation through effective monitoring mechanisms;</li> <li>Regularly reviewing the internal ESG risk assessment and control mechanisms and their effectiveness, monitoring the assessment of key opportunities and risks, corporate actions and effectiveness, reviewing the core ESG policies and internal rules and monitoring their implementation;</li> <li>Reviewing the sustainability objectives and progress, establishing material sustainable development issues and ensuring their implementation and full compliance and disclosure.</li> </ol>
SDM Committee	<ol> <li>Ensuring that the Group fully considers ESG factors in strategy formulation and business operations, not only does it need to evaluate its impact (financial and reputational) on the medium and long-term development of the Company, but also fully considers the impact on key stakeholder groups, nature and society, and formulates and optimises action plans and goals accordingly;</li> <li>Implementing effective management of ESG risks, especially climate, safety, integrity, environmental protection and human rights-related risks, regularly review relevant risks according to the established mechanism and evaluate the effectiveness of response actions;</li> <li>Ensuring that the Group's sustainable development philosophy and sustainable development goals are implemented to all systems and functional departments at all levels. In terms of key ESG matters, such as environmental protection, occupational safety and health, integrity, climate risk management, etc., specific and feasible work plans are formulated, goals related to the annual performance appraisal of middle and senior management personnel, employees of key departments/positions are set, and mechanisms are established to regularly evaluate the effectiveness of work plans and the progress of goals;</li> <li>Guiding and reviewing the work of the ESG working group, such as participating in the materiality assessments, reviewing quarterly and annual data on core ESG indicators and reviewing ESG risks and opportunities, as well as the corresponding strategies and actions taken, ESG core indicators and ESG reports.</li> </ol>
ESG working group	<ol> <li>Collect, consolidate and report quarterly/annual performance of ESG core indicators to the SDM Committee;</li> <li>Keep abreast of the latest regulations and guidelines on ESG governance and information disclosure by attending training courses and update the SDM Committee in a timely manner to ensure that the SDM Committee can improve the relevant processes/governance structure as soon as possible to meet the regulatory requirements;</li> <li>Report to the SDM Committee on the requests of key stakeholders and assist in materiality assessment;</li> <li>Prepare ESG reports;</li> <li>Understand, collect and provide feedback and suggestions from/to the execution departments to assist the SDM Committee in evaluating the progress of ESG work and the effectiveness of ESG risk management and internal control system.</li> </ol>
Execution department of ESG work	<ol> <li>The purpose of the environmental protection office and environmental protection officer were to ensure that all environmental protection indicators in the daily business operation meet or even exceed national or local standards.</li> <li>The supporting service departments serve as a bridge between the Group and its employees, the community and society, maintaining communication with stakeholder groups and reflecting their opinions in a timely manner.</li> </ol>

During the Reporting Period, the Board attached great importance to the monitoring of ESG matters. The Board is mainly responsible for formulating, regularly reviewing and optimising the Group's sustainable development strategy, monitoring the SDM Committee and ensuring its effective operation through effective monitoring mechanisms, regularly reviewing the internal ESG risk assessment and control mechanisms and their effectiveness, monitoring the assessment of key opportunities and risks, corporate actions and effectiveness, reviewing the core ESG policies and internal rules and monitoring their implementation, and reviewing the corporate sustainability objectives and progress, establishing material sustainable development issues and ensuring their implementation and full compliance and disclosure.

In order to raise the awareness and importance of environmental and social benefits among our management team and employees, we have taken the initiative to place the maximisation of environmental and social benefits as equally important as economic benefits. The Group has included ESG-related elements, including production safety, environmental protection performance and compliance, occupational safety and health and integrity when setting annual performance indicators for management personnel and relevant departments and staff.

ESG-related indicators account for more than 30% of the annual key performance indicators (KPI) of middle and senior management personnel. Among them, the indicators related to the Group's established climate action goals and energy saving and consumption reduction goals account for more than 10%. Through the linkage with the annual performance appraisal, middle and senior management personnel are encouraged to pay close attention to daily ESG affairs and strive to achieve higher performance goals, thereby promoting the achievement of the Group's annual and long-term sustainable development goals.

#### **BUSINESS ETHICS AND INTEGRITY MANAGEMENT SYSTEM**

A fair, legal and ethical business environment is the foundation for sustainable development of all businesses. It is also an important cornerstone for enterprises to build their reputation, enhance customer and staff loyalty, improve productivity and supply chain management efficiency, and achieve long-term development. Integrity is the red line as well as the bottom line. Over the years, Xinyi Solar has strictly complied with the "Criminal Law of the People's Republic of China", the "Anti-Money Laundering Law of the People's Republic of China", the "Anti-Unfair Competition Law of the People's Republic of China", the "Anti-Money Laundering Law of the People's Republic of China", the "Anti-Moneyo I aw of the People's Republic of China", the "Interim Provisions on the Banning Commercial Bribery", the "Prevention of Bribery Ordinance of Hong Kong", the "Anti-Corruption Commission Act" of Malaysia and its amendments, the "Competition Act 2010" of Malaysia and other applicable anti-corruption and bribery laws in China and other countries and locations where it operates. Xinyi Solar has established internal management systems including the Xinyi Group Integrity Management System, "Ten Integrity Regulations for Xinyi Employees", "Conflict of Interest Management System", "Bribery Receiving Management System", "Measures for rejecting bribery rewards of Xinyi Group" and "Whistleblower Protection and Reward System" to clearly put an end to business ethics violations including corruption, bribery, money laundering, unfair competition, fraud and conflicts of interest. The Group adheres to the principle of "zero tolerance" for any form of corruption, and practises the attitude of "rejecting commercial bribery, not accepting bribes and not bribing" in all aspects of daily operations.

The Group adheres to implement the working policy of "prevention first and supplemented by investigation and handling" aiming to continuously build a Xinyi integrity system to deter corruption, prevent corruption, and foster a mindset against corruption through integrity system establishment, publicity and training, and on-site integrity inspections. In order to strengthen the construction of corporate integrity, the Group established the Internal Control Centre as the dedicated department for integrity case investigation and integrity culture construction. Directly led by the Chief Executive Officer, it independently carries out integrity publicity and training, daily supervision of employees' integrity behaviour as well as acceptance, investigation and handling of integrity complaints in accordance with the "Xinyi Group Integrity Management System".



Integrity and law-abiding, self-restraint and honest practice are our requirements for every employee. The Group explicitly and clearly put forward the code of business ethics that employees should abide by when dealing with the Group's business affairs, and the corruption or irregularities that should not be committed in the "Ten Integrity Regulations for Xinyi Employees". The Group strictly requires employees to refrain from taking advantage of their positions to solicit and accept bribes or improper benefits from cooperative business units and individuals and prohibits employees from bribing or providing improper benefits to business partners, partners' agents and public officials. In order to encourage employees to refuse commercial bribery, the Group implements a reward system, in which the employee will be awarded all or part of the bribe amount, inform praised in the "Integrity Xinyi" WeChat official account, included in the talent pool and given priority in promotion, salary increase, appraisal and title evaluation. In order to further establish a style with integrity and incorruptibility and effectively prevent directors, supervisors, senior management personnel and personnel in other important positions of the Company from taking advantage of their powers or positions to seek personal interests with enterprise resources or to commit acts that violate the Group's principles of fairness and justice in business cooperation and employment management, the Group requires them to declare conflicts of interest annually in accordance with the "Conflict of Interest Management System", so as to identify potential conflicts of interest, prevent personnel management risks and protect the interests of the Company, shareholders and employees.

#### **Integrity Publicity and Training**

The Group attaches great importance to integrity publicity and integrity training, provides integrity training for all new employees, and requires employees in key departments and key positions to participate in the annual integrity training. During the Reporting Period, the Internal Control Centre arranged 8 Group-level integrity training sessions with a total of 756 new employees and employees in key positions participating in the Group-level and Company-level training, and the coverage rate of key departments and positions was 100%. The integrity training is mainly based on the Company's integrity-related rules and regulations, and takes typical case analysis as the starting point, covering legal provisions, corporate integrity culture, common behaviours violating integrity systems, integrity management system and reporting procedures, etc. Employees participating in the training are required to submit reports sharing their reflections on the training and pass written examination. At the same time, daily advocacy and case interpretation of integrity practices are carried out for all employees through the "Integrity Xinyi" WeChat official account.



#### **On-Site Integrity Inspections**

The Internal Control Centre carries out daily supervision by reviewing vouchers and data, conducting irregular interviews with key departments and personnel, and regularly arrange working teams to production sites and conducts on-site integrity inspections of various production sites to strengthen supervision. During the Reporting Period, the Internal Control Centre launched the annual integrity work in accordance with the provisions of the "Integrity Management System" and the practical needs. The key functional departments such as procurement, sales and finance has been investigated and interviewed in strict accordance with the prescribed proportion of number of employees, and at the same time, the potential integrity risks and hidden dangers of key businesses and key projects have been investigated through in-depth research on the front-line work. The investigations did not reveal any serious integrity-related breaches of local laws and regulations that would have a material impact on the Group. During the Reporting Period, the Group had one corruption litigation case filed and concluded against the Group or its employees.

#### **Reporting Management and Whistleblower Protection**

The Group has established an integrity supervision system, encouraging suppliers, employees, and partners to report violations such as corruption, bribery, and fraud. "Whistleblower Protection and Reward Policy" has been implemented to ensure transparent and secure reporting procedures. The Internal Control Department, operating independently and reporting directly to the CEO, handles investigations with strict confidentiality and prohibits retaliation, with severe penalties for violations. Additionally, integrity performance is incorporated into management assessments, accounting for no less than 15% of evaluations, to reinforce internal oversight.

#### Procedures for Whistleblowing Handling



The Group has developed various whistleblowing channels to encourage employees, partners and the public to report on any corruption behaviour related to the Group, including solicitation of bribes and implied acceptance of bribes.

#### Integrity Whistleblowing Methods

Whistleblowing hotline: (86) 0553-2660777 Online method: "Integrity Xinyi" WeChat Official Account Others: Contact the Internal Control Centre personnel or report in person to employees from Internal Control Centre of the Company

#### **Supplier Integrity Management**

"Trust" is the core value that the Group adheres to. Integrity is the foundation of an enterprise and an important principle in maintaining market order. In order to ensure that the behaviours of suppliers meet our expectations, the Group has established the "Supplier Code of Conduct", which applies to all suppliers to prevent conflicts of interest and corruption. For the purpose of a fair, just and win-win business environment creation, Xinyi implements a whole process of integrity management for its suppliers.

Business negotiation	Suppliers shall receive integrity training and recognise Xinyi's integrity culture
Entering into agreements	Signing of the "Supplier Integrity Agreement", the "Notification Letter on Integrity Management, Mutual Benefit and Win-Win" and reply letter to Learn about "Xinyi Untrustworthy List", Suppliers shall undertake to strictly abide by laws and regulations in business transactions and prohibiting any form of bribery, and proactively monitor and report illegal and undisciplined practices in the course of cooperation between the two parties
Violation of "Supplier Integrity Agreement" and/ or dishonest behaviour in business cooperation	The Group will immediately cease business cooperation with suppliers included in the untrustworthy list. The Group will immediately stop the business cooperation and prohibit it from participating in the Group's tendering, procurement and business cooperation within a set period of time. After the set period of time, the supplier can only be included in the cooperation list after re- evaluation. If the supplier is included into the untrustworthy list for the second time, it will be permanently disqualified from cooperation

The Group encourages all suppliers to prevent their own bribery and corruption at a standard higher than that required by laws and regulations, and work with the Group to create an honest and fair business environment. During the Reporting Period, apart from this, there were no other confirmed incidents of termination or non-renewal of contracts with business partners due to corrupt practices.

#### Anti-unfair competition

The Group strictly complied with the relevant provisions of the "Anti-unfair Competition Law of the People's Republic of China", the "Competition Act 2010" of Malaysia and the Group's code of business ethnics, followed the principles of voluntariness, equality, fairness and integrity, consciously safeguarded the order of competition in the market, and strictly prohibited all forms of unfair competition in its business activities. The Group has adopted effective internal monitoring and preventive measures to ensure the regulation of business conduct and is subject to the supervision of national and local governments. The Group is not aware of any legal proceedings against the Group in relation to anti-competition or anti-trust practices during the Reporting Period.

In addition to regulating its own business practices to ensure legal compliance and ethical principles, the Group also provides clear guidelines and expectations for suppliers through the "Notification Letter on Integrity Management, Mutual Benefit and Win-Win" and the "Supplier Integrity Agreement", to resolutely resist all acts of counterfeiting, adulteration, false publicity, infringement of trade secrets, low-price dumping, commercial defamation and other improper means that affect fair cooperation and seek improper benefits in the process of tendering, procurement and contract execution. All suppliers are required to sign a reply letter, indicating that they are noted that the Group has a "zero tolerance" attitude towards unfair competition and all dishonest business operations. All suppliers involved in violations of the principle of good faith trading will not only have to face a full refund of the purchase price and bear compensation and other corresponding legal responsibilities but will also be included in the Group's untrustworthy list and lose their eligibility to participate in the Group's tendering, procurement and business cooperation within a designated period. During the Reporting Period, there was no confirmed incidents of termination or non-renewal of contracts with suppliers due to violation of the principle of good faith trading.

#### Information Disclosure and Transparency

Xinyi Solar strictly complies with the relevant laws and regulations on information disclosure and requirements of the Listing Rules of the Hong Kong Stock Exchange, adhering to the premise of compliance with the laws and regulations while taking into account the needs of investors and consideration for operations of the Company, to ensure that the disclosure is truthful, accurate, complete and easily understandable and equal opportunities are available for all shareholders to receive the information.

The Group publishes announcements and disclosure of the Company through the official website of the Hong Kong Stock Exchange and the official website of the Company. In addition, the Group takes into full consideration the needs of investors and overall factors of the capital market and, if necessary, proactively initiates voluntary disclosure to help shareholders and potential investors to understand its latest operations, business development and financial situation as an effective supplement to the mandatory disclosure of information.

The Group attaches importance to communication with investors and potential investors by establishing various and smooth communication channels while answering questions and solving problems in a timely and effective manner in the form of general meetings, results presentation meetings, brokerage strategy meetings, research and development studies, roadshows, emails and one-on-one communications. In terms of online channel construction, we have set up a special column for Investor Relations on our official website and updated the latest information of the Company effectively on our corporate WeChat Official Account and WeChat Channels.

#### **Issues of focus**

- Actual impact of climate change on business
- Sustainable development goals
- Response to climate risks
- Business resilience

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- Water resources risks and response strategies
  - Board supervision and climate information disclosure



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The year 2024 became the warmest year since records began in 1850, with the first time the global average temperature was 1.5 °C above pre-industrial levels, exceeding the worst-case target set by the Paris Agreement. Along with frequent extreme climate events, climate change is profoundly affecting society, enterprises and all individuals. The urgency of global climate actions and the far behind expected progress of carbon reduction have posed challenges to the sustainable development of humanity, enterprises and society. In the face of the challenges brought by climate change, the Group has established and continuously improved its governance structure, risk assessment and management mechanism to promptly identify and take effective actions to actively respond to the challenges, so as to enhance the resilience of its core business, reduce and avoid the significant impact of climate change on its business and long-term development. At the same time, the Group invested 100% of its capital expenditure in the sustainable development business that promotes the global carbon neutrality process in order to fully grasp the climate opportunities.

Xinyi Solar follows the disclosure recommendations of the Task Force on Climate-related Financial Disclosure (TCFD) and the Hong Kong Stock Exchange to comprehensively identify the risks and opportunities of climate change, and to establish management strategies and action paths to cope with climate change. We are also actively pursuing technological innovation and optimisation of our management processes, avoiding unnecessary energy consumption and improving energy efficiency through equipment upgrades and technological modifications. At the same time, we continue to explore opportunities for the use of renewable energy, fully implement emission compliance and actively enhance the efficiency of resource utilisation and strive to achieve a win-win situation in terms of environmental and economic benefits through a variety of measures. In addition, the Group has set up climate targets to monitor the achievement of the targets and the progress of work, and to achieve quantitative analysis and regular precision reviews.

#### **BOARD SUPERVISION AND CLIMATE INFORMATION DISCLOSURE**

#### Governance

Xinyi Solar highly values the work of climate change governance and has continuously improved its internal management mechanism and methods to continuously enhance the effectiveness of climate change governance. Climate-related risks and opportunities are one of the key issues of sustainability governance, and the governance structure for climate-related risks and opportunities is consistent with the sustainability governance. The Company has established a climate governance system with the Board of Directors as the supreme organisation and the SDM Committee which reports to the Board of Directors on a regular basis, and an ESG Working Group, which is under the SDM Committee and assists the SDM Committee in promoting the work related to climate risk management.

Board	<ul> <li>Formulating, regularly reviewing and optimising the Group's long-term climate strategies and climate policies</li> <li>Establishing internal mechanisms for climate management</li> <li>Overseeing the management of climate-related affairs by the SDM Committee</li> </ul>
SDM Committee	<ul> <li>Formulating, regularly reviewing and updating the five-year climate goals</li> <li>Gradually implement the Group's long-term climate strategies</li> <li>Formulating appropriate climate-related risk and opportunity management action plans, and regularly reviewing and refining them to ensure the implementation of the Group's climate policies in daily operations</li> <li>Overseeing the climate goals and the progress of climate actions, including setting annual goals and supervising the detailed implementation at all levels, evaluating their reasonableness based on the progress of the five-year climate goals and the effectiveness of climate actions, and updating climate goals and optimising action plans in a timely manner</li> </ul>
ESG working group	<ul> <li>Providing regular updates to the SDM Committee on the progress of climate actions, climate goals and the latest changes in the identified physical and transition risk parameters</li> <li>Coordinating the implementation of climate actions</li> <li>Consolidating relevant resources, including the latest laws, regulations and policies as well as updated requirements of international and industry best practices for the reference of the SDM Committee and the Board</li> <li>Continuously improving professional knowledge and skills related to climate risk management and information disclosure</li> </ul>

In order to enable middle and senior management personnel to attach importance to climate-related risk and opportunity management matters, earnestly implement the Group's climate actions and strive for better performance in climate goals, the proportion of indicators related to the climate actions and targets accounts for 12% in the annual key performance indicator (KPI) assessment of middle and senior management personnel. For important matters such as climate-related risk management, climate goals and the progress of climate actions that have a substantial impact on the Group's long-term climate strategies, the SDM Committee reports to the Board from time to time to ensure that the Board is fully aware of the risks and opportunities that may have a potential impact on the Group's sustainable development, so as to achieve effective climate governance, avoid risks and seize opportunities.

In addition, we have provided training on the subject of climate change for our Board members in the form of knowledge sharing with external experts, etc., to support them in acquiring the necessary expertise to competently manage and oversee climate-change-related issues. To ensure the effective implementation of various measures, we have included quantitative indicators related to climate change in the performance appraisal of the relevant management staff to motivate and recognise their contribution to climate change.

The Group's internal audit team would submit an annual risk management and internal control report, which includes environmental and climate-related risk assessment and management to the Audit Committee every year. During the Reporting Period, the review results of the internal control and the Audit Committee's assessment to the results did not reveal significant deficiencies in the climate-related risk management and internal control systems.

#### **Climate Policy**

In the face of climate change, the Group adheres to a precautionary attitude and is committed to managing climate-related physical and transition risks based on the PV industry. The Group actively grasps the growth opportunities brought by climate change and global energy transition and fully supports global carbon neutrality. We also encourage suppliers and other business partners to formulate and implement their own climate policies with reference to the Group's climate policies where applicable so as to actively respond to climate change and carry out risk management and comprehensively improve the climate resilience of the industrial chain.

	Climate Policy of Xinyi Solar
Legal compliance	Comply with current climate management-related laws, regulations and policies in business operations, and pay close attention to their updates and changes
Based on PV	Focusing on the PV industry, we actively improve the production capacity of solar glass and the grid-connected capacity of solar farms to facilitate the achievement of global carbon neutrality
Proactive emission reduction	Actively take measures such as energy saving and consumption reduction, yield improvement and application of renewable energy in business operations to reduce carbon emission intensity, provide highly efficient and low-carbon products to meet end-user needs and seize climate opportunities
R&D and innovation	Continuously carry out research and development and innovation, and seek new technological breakthroughs to achieve long-term carbon emission reduction and ultimately carbon neutrality
Enhanced Disclosure	Improve the level of climate information disclosure with reference to international and local best practices, strengthen communication with key stakeholders on climate risk management, climate actions and goal progress. While maintaining information transparency, we actively guide internal and external stakeholders (such as employees, suppliers, business partners and communities) to enhance climate risk awareness and proactively enhance climate defense capabilities

#### **Risk Management**

Xinyi Solar has established a traceable and assessable climate change risk management system with reference to TCFD's disclosure recommendations and requirements. We have identified physical risks and transformation risks in short, medium and long term, as well as opportunities related to energy, products and services. Physical risks include acute and chronic risks, when transformational risks cover policy and legal, technology, market and reputation risks. To optimise the allocation of resources and improve the efficiency of climate change risk management, we have integrated the climate change risk management process into the Company's overall risk management process, initiated proactive assessment of the identified climate change risks and formulated effective management measures to ensure that such risks are within control.



#### **Strategies**

In 2024, Xinyi Solar assessed the climate performance of us and our member companies (same scope as this report) from 1 January 2024 to 31 December 2024 and the climate-related risks and opportunities at our established facilities with reference to the TCFD recommendations, as well as communications and recommendations from the stakeholders.

#### Climate scenarios and key parameters

In 2024, the internal scenarios disclosed by the Group in the 2021 ESG Report were confirmed after internal assessment, which are still applicable to the analysis and assessment of the Group's climate risks and opportunities, as well as corporate strategy flexibility. The Group developed internal scenarios based on the climate scenarios publicly available by the "Net Zero by 2050: A Roadmap for the Global Energy Sector" issued by the International Energy Agency ("**IEA**"), the IPCC Sixth Assessment Report Working Group I Report, and the Network of Central Banks and Supervisors for Greening the Financial System. The different impacts of physical risks and transition risks on the Group's production and operation, business layout and long-term development under three different climate scenarios: neutral scenario, positive scenario (below 2° scenario), and ideal scenario ( $1.5^{\circ}$  scenario). Specific assumptions about the internal scenarios can be found on pages 42 to 47 of the 2021 ESG Report. Based on the main assumptions of the physical environment, socio-economic environment and energy environment under different scenario and to ideal scenario, while the probability of occurrence and impact of transition risks will decrease from neutral scenario to positive scenario and to ideal scenario, while the probability of occurrence and impact of transition risks will increase. Therefore, the Group identified relevant physical risk parameters in neutral and positive scenarios and identified relevant physical risk parameters in neutral and positive scenarios and identified relevant physical risk parameters in neutral and positive scenarios and identified relevant transition risk parameters in positive and ideal scenarios, and ranked them from high to low according to the probability of occurrence and impact:

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	Neutral Scenario	Positive Scenario (<2°C scenario)	Ideal Scenario (1.5°C scenario)
Physical Risk Parameters	<ul> <li>Number of extreme weather (typhoons, floods etc.) and such as equipment replacem</li> <li>Annual precipitation days solar radiation and annual po</li> <li>Number of extremely hot day</li> <li>Baseline water pressure at the</li> </ul>	direct economic losses, ent, insurance, etc. (compared with annual ower generation tracking) ys throughout the year	Not applicable
Transition Risk Parameters	Not applicable	<ul> <li>capacity in different i</li> <li>Global Trade Policy (I Chain Traceability)</li> <li>Renewable energy (Trading mechanism and price)</li> <li>Carbon price (trading trading in China, ca Europe and other reg</li> <li>China's Industrial E (Industrial/Glass Mar Requirements)</li> <li>China's Environmenta</li> </ul>	Product Carbon Footprint, Supply power market trading in China n, spot transaction percentage g mechanism and price of carbon rbon tax policies and prices in

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#### **CLIMATE RISKS AND RESPONSE ACTIONS**

Based on neutral scenario, that is, based on the changes expected in the physical, socio-economic and energy environment under the currently announced climate policies, the Group identifies climate risks that have a high probability of occurrence and have an impact on the Group's business and/or finance through a qualitative assessment based on historical data analysis, taking into account the combination of four aspects: likelihood, impact, adaptability, and resilience. The forecast of transition risks, especially in terms of probability of occurrence and impact, has made reference to the changes in the socio-economic environment and energy environment from positive scenario to ideal scenario. The identified climate risks that have or may potentially have actual impacts on the Group's business and/or finance have been disclosed in this Report. The Group has also taken corresponding countermeasures and actions and has fully considered the resilience of response strategies under different climate scenarios. The financial impact section is mainly on qualitative in nature, with some quantitative indicators provided in the form of case studies in conjunction with historical data. We conducted scenario analysis of short-term (0-3 years), mediumterm (3-10 years) and long-term (10-50 years) climate-related risks and opportunities for each scenario.

#### **Physical risks**

Physical risks caused damage to the Group's solar power generation equipment, affected the safety and health of employees or disrupted the delivery of services/products during the historical period of operation. During the past operating period, the physical risks that had a significant impact on the Group were mainly extreme weather and climate events such as typhoons, floods, heavy rainfall and thunderstorms, as well as long-term climate changes such as rising temperatures (increased in extremely hot weather) and changes in precipitation patterns (increased rainy weather). The Group's production bases are located in the PRC (Wuhu of Anhui Province, Zhangjiagang of Jiangsu Province, Beihai of Guangxi Zhuang Autonomous Region, Tianjin Municipality) and Malacca of Malaysia, neither of which is located in areas with high/extremely high baseline water pressure. In addition, 96% of the water used for solar glass production can be met by recycled water and more than 78% of fresh water comes from natural water sources. The Group has achieved efficient water resources management and is still optimising it. Therefore, solar glass production has low dependence on fresh water (especially municipal water supply). The solar farm business is even less dependent on water resources because the PV power generation process does not require the consumption of water resources. It only consumes a very small amount of water resources during the operation and maintenance process and for employees' daily use. Therefore, the Group has not encountered or expected to have a significant business and financial impact due to sea level rise and water resource stress.



According to the assumption of the physical environment under the neutral scenario, the global warming will reach 2 °C by 2060, the frequency of extreme high temperature weather is several times to tens of times the present, and the intensity of extreme precipitation is significantly increased. Affected by climate change, the frequency and intensity of extreme weather and climate events will increase significantly, which is expected to have a more significant impact on the Group. The key impacts of physical risk on the Group's core businesses are summarised as follows:

Risk Type: Acute Physical Risk		
Specific Climate Risks	Increased intensity of extreme weather events such as typhoons, floods (caused by extreme precipitation), thunderstorms and rainstorms	
Impact Term	Short, medium and long term	
Impact	Medium to high	
Probability of Occurrence	Medium to high	
Value Chain Impacts	Operation	
Business Impacts	<ol> <li>Solar Farm Business:         <ol> <li>Potential damage to PV modules leading to failure of solar farms or affecting power generation efficiency</li> <li>Increasing operation and maintenance risks and affecting the safety and health of employees</li> <li>Possible impact on the progress of project development and construction</li> </ol> </li> <li>Solar Glass Business:         <ol> <li>Potential damage to production facilities and equipment and possible impact on production, raw materials and finished product warehousing.</li> <li>Possible impact on logistics, affecting the supply of raw materials and product delivery</li> <li>Possible impact on project construction progress</li> </ol> </li> </ol>	

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Risk Type: Acute Physical Risk	(	
Risk Type: Acute Physical Risk Financial Effects	<ul> <li>Solar Farm Business:</li> <li>1) Impairment of assets due to early retirement of equipment</li> <li>2) Increase in operating costs due to equipment failure</li> <li>3) Decrease in revenue due to the impact of power generation efficiency</li> <li>4) Increased capital expenditure, and the scale and timing of grid connection of new solar farm projects may also affect the revenue performance for the year</li> <li>Solar Glass Business:</li> <li>1) Damage or scrapping of facilities and equipment leads to asset impairment, which may affect production and hence order delivery/current revenue performance</li> <li>2) Increased production costs and capital expenditures due to damage of raw materials, finished products and/or equipment</li> <li>3) Increased transportation costs</li> </ul>	
	4) Increased capital expenditure and disruption to capacity expansion may also affect revenue performance for the year	
Climate Action	<ol> <li>Comprehensive assessment of the probability of occurrence and impact of climate risks with reference to historical data, full consideration of extreme weather risks in the design of solar farm projects, and adoption of PV modules and auxiliary materials with higher protection performance to improve the ability of solar farms to cope with extreme weather conditions</li> <li>Centralised 24-hour remote monitoring through the electronic monitoring platform to effectively identify abnormal conditions for timely handling and reduce economic losses</li> <li>According to the requirements of the Disaster Prevention and Treatment Plan for the Solar Glass Factory, conduct regular inspections and eliminate safety hazards susceptible to extreme weather, take comprehensive disaster prevention measures in advance to ensure personnel safety, pay close attention to weather conditions, establish and improve standardised emergency procedures to quickly resume work and production after disasters to minimise disaster losses</li> <li>Control the inventory level of raw materials through the centralised procurement centre, rationalise procurement arrangements to ensure sufficient inventory of raw materials to protect against short-term extreme weather factors</li> <li>Improve the integrated transportation capacity of water and land transport</li> <li>Improve the safety awareness of construction personnel to implement safe construction technical specifications and operating procedures through training, and strengthen construction quality, safety risk control and emergency response under extreme weather conditions</li> </ol>	

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ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2024 | XINYI SOLAR HOLDINGS LIMITED

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Risk Level: Long-term Physica	ıl Risks	
Specific Climate Risks	<ol> <li>Changes in rainfall (precipitation) patterns and extreme changes in climate patterns</li> <li>Increase in average temperature</li> </ol>	
Impact Term	Long term	
Impact	Low	
Probability of Occurrence	Medium to high The degree of impact and probability of occurrence decline from neutral scenario to positive scenario and to ideal scenario	
Value Chain Impacts	Operation	
Business Impacts	<ol> <li>Continuous rainy weather will lead to lower power generation</li> <li>Under high temperature, workshop/outdoor working hours need to be controlled, and operation in high temperature environment may adversely affect the working efficiency and health of employees</li> </ol>	
Financial Effects	<ol> <li>Decrease in revenue</li> <li>Increase in costs, e.g. increase in electricity cost due to the use of air-conditioning and environmental protection equipment, increase in water cost due to greater water evaporation resulting from high temperature</li> <li>Increase in labour cost due to flexible scheduling, provision of protective equipment and drugs, high temperature subsidies, etc.</li> </ol>	
Climate Action	<ol> <li>Accumulate historical data for site selection of new solar farms through comparison of power generation performance of different solar farm projects in different regions</li> <li>Improve the power generation efficiency of solar farms through efficient operation and maintenance to partially offset the impact of persistent rainy weather. In 2024, the completion rate of electricity generation target of the Group's grid-connected solar farm projects in operation exceeded 100%, which represents efficient operation and maintenance to effectively offset the negative impact of weather and the annual degradation rate of components on electricity generation during the Reporting Year</li> <li>Formulate heatstroke prevention and cooling measures for high-temperature weather, including adjusting operation arrangements, controlling operation hours, and providing heatstroke prevention and cooling supplies and drugs to ensure the health of employees</li> </ol>	

#### **Transition Risks**

The Group's core business is in line with the global energy transition trend, which has a positive impact on achieving the goal of carbon neutrality, mitigating global climate change and enhancing the climate resilience. Therefore, in the neutral scenario, the transition risk does not have a negative impact on the Group's core business operation and development. Even in the positive scenario (below 2  $^{\circ}$  scenario) and the ideal scenario (1.5  $^{\circ}$  scenario), the Group does not need to face business transformation risks and pressure. On the contrary, in order to realise the global energy structure under ideal scenarios and achieve carbon neutrality, the demand for the Group's core products, solar glass and PV power generation, is expected to increase significantly.

The production of solar glass inevitably produces greenhouse gas emissions due to the consumption of energy and raw materials, and most of the Group's solar glass production capacity located in China. However, because the PV industry is a emerging industry strongly supported by national policies and the Group's energy consumption, greenhouse gas emissions and other environmental performance are far better than those of its peers; therefore, even under an ideal scenario, the Group's production and operations may be subject to higher environmental efficiency requirements, this will not affect the sustainable development and core competitiveness of the Group.

The Group assesses the challenges that the transformation trends in policy, laws and regulations, technology, market and reputation may bring to the development of the Group's core business and identifies potential major risks based on positive scenario and ideal scenario. For the potential risks identified, the Group has adopted effective preventive/mitigation measures:

Risk Level: Policies, Laws and Regulations	
Specific Climate Risks	Carbon Price Increase (Carbon Emissions Trading)
Impact Term	Medium to long term
Impact	No impact under the neutral scenario, with the impact escalating from the positive scenario to the ideal scenario
Probability of Occurrence	The impact escalates from the positive scenario to the ideal scenario
Value Chain Impacts	Upstream and operation

alum	ions ently, the power industry, cement industry, iron and steel industry and inium electrolysis industry in China are included in the national carbon
alum	
of 20 tradia is ex fores at the the in on th 2) Durin Group was n emiss there 3) Unde USD 2 emiss closin still f futur active not le	ng market. In addition, among the 9 local carbon trading pilot markets, the p only has one solar glass production line in Tianjin. Besides, as of the end 24, Tianjin production base did not need to participate in the local carbon ng market. As a high energy-consuming industry, the solar glass industry pected to be included in China's national carbon trading market in the eeable future. However, provided that the Group's carbon intensity remains e leading level in the industry and the annual decline is not less than 2%, nclusion in the carbon trading market would not have a substantial impact e business ng the Reporting Period, the greenhouse gas emission intensity of the p's solar glass products (in tonnes) decreased by 8.4% year-on-year, which much higher than the requirement of carbon intensity reduction for carbon sion trading. Therefore, according to China's current quota mechanism, was no need to purchase additional carbon emission quota er the ideal scenario, the IEA expects that China's carbon cost may rise to 200/tonne by 2050. In 2024, the average trading price of China's carbon sion quota has risen to approximately RMB91.8/tonne, and the year-end ng price has increased 22.75% to RMB97.49/tonne year-on-year, but it is ar lower than the IEA's forecast. Therefore, based on the assumption of e increase in carbon emissions compliance costs, the Group must take more e measures to ensure that the annual carbon emission intensity decline is ess than 2% or achieve decarbonisation production through the research development on furnace technology

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Risk Level: Policies, Laws and Regulations		
Climate Action	<ol> <li>Setting up a carbon management team to improve the Group's carbon emission management</li> <li>Collecting the Group's carbon emission data for the purpose of setting a science-based carbon reduction target (SBTi) in the future. In order to ascertain the current carbon emission intensity of the Group's products and to plan for the future carbon reduction pathways in Scope 1, Scope 2 and Scope 3, the mainstream products have been certified to ISO 14067: 2018 carbon footprint in 2024</li> <li>Improving production efficiency and yield rate and reducing unit carbon emissions</li> <li>Launching distributed rooftop PV power generation and residual heat generation projects at production bases while continuing to promote supply chain emission reductions</li> <li>Setting a five-year quantitative goal to reduce the carbon emission intensity of solar glass products and set up an effective incentive mechanism to strive for better carbon emission intensity performance</li> <li>Exploring the feasibility of low-carbon/decarbonisation furnace technology (such as the use of hydrogen) and increase research and development efforts</li> </ol>	



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Risk Level: Policies, Laws and	Regulations	
Specific Climate Risks	Strengthen energy efficiency and environmental protection control	
Impact Term	Medium to long term	
Impact	Escalating from neutral scenario to positive scenario and to ideal scenario	
Probability of Occurrence	Escalating from neutral scenario to positive scenario and to ideal scenario	
Value Chain Impacts	Upstream and operation	
Business Impacts	<ol> <li>China implements a dual control system for energy consumption, thus the additions of solar glass production capacity of different provinces are restricted by the energy consumption quotas</li> <li>Strict implementation of the production capacity risk alert mechanism leads to the lengthened process time and increasing difficulty related to the administrative approval of new solar glass production capacity</li> <li>The National Development and Reform Commission issued the "Benchmark and Standard Energy Efficiency Levels in Key Industries" notice to promote the improvement of energy efficiency levels and strive to fully achieve the benchmarking levels. For existing projects, enterprises are encouraged to strengthen the application of green and low-carbon process technology and equipment, driving the entire industry to increase energy-saving and carbon-reducing transformation efforts, and improving the overall energy efficiency level</li> <li>The Ministry of Ecology and Environment and the Departments of Ecology and Environment of various provinces and cities, where we operate, have introduced more stringent standards and adopted more stringent regulatory measures on air pollutant emissions, automatic monitoring and management of key pollutant-discharging enterprises, and hazardous waste management. Therefore, not only will environmental protection emission limits and more standardised and stringent regulatory systems will also require solar glass manufacturers to invest more resources in enhancing pollutant control and waste management to reduce pollutants and waste produced</li> </ol>	
Financial Effects	<ol> <li>Increase in capital expenditure (environmental protection equipment, etc.)</li> <li>Increased uncertainties in capacity plans and longer ramp-up cycles may affect the expected revenue performance</li> <li>Increase in costs (such as operation of environmental protection equipment, increase in market price of electricity and raw materials)</li> </ol>	
Climate Action	<ol> <li>Focusing on the development of policies and laws and regulations</li> <li>Increasing reasonable investment, implementing emission reduction measures and enhancing energy management to meet policy requirements. The Group's performance in energy efficiency and environmental protection has maintained at industry-leading level, and the intensity indicators have decreased year on year. Therefore, the Group has advantages over its peers when competing for quotas of new production capacity</li> <li>Expanding overseas production capacity. The Group has experience in overseas production expansion and will not be subject to China's policy control in the long run. Two production lines of 1,200 tonnes per day each have been added in Malaysia in 2024. Currently, there are two production lines under construction in Indonesia</li> </ol>	

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Risk Level: Technology			
Specific Climate Risks	Transforming to lower emission technology		
Impact Term	Medium to long term		
Impact	No impact under the neutral scenario, escalating from the positive scenario to the ideal scenario		
Probability of Occurrence	Escalating from the positive scenario to the ideal scenario		
Value Chain Impacts	Operation		
Business Impacts	<ol> <li>Under the ideal scenario, carbon dioxide emissions generated in the global energy-related and industrial processes will decrease by 40% in the next 10 years. Therefore, it may require the current high-energy consumption industries to reduce carbon emissions as soon as possible by increasing research and development investment</li> <li>At present, the production technology of solar glass furnaces still quite relies on fossil fuels. Therefore, if the policy becomes stricter, the Group may need to increase investment in research and development and change the production technology to achieve decarbonisation production. Based on the current price of hydrogen, the availability and stability of low-carbon hydrogen fuels (such as green hydrogen) and the consideration of production safety, hydrogen is not yet suitable as a primary fuel for commercial production of solar glass</li> </ol>		
Financial Effects	<ol> <li>Increase in research and development costs</li> <li>Decrease in operating income</li> <li>Accelerated depreciation of energy-intensive equipment and asset impairment</li> </ol>		
Climate Action	<ol> <li>Low-carbon technology innovation based on market demand and reasonable avoidance of market risks</li> <li>The Group is the only enterprise in the solar glass industry with its own research institute, and is the industry leader in both technology and new product research and development. Therefore, even if the transformation to lower-carbon technology is needed in an ideal scenario, the risk will be lower than that of its peers, and it is more likely to achieve technological breakthroughs ahead of its peers</li> <li>Conducting energy-saving retrofits to enhance equipment efficiency</li> </ol>		

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Risk Level: Market			
Specific Climate Risks	Full life cycle carbon emission management of PV products (EU carbon tariff, low carbon PV modules)		
Impact Term	Short, medium and long term		
Impact	Escalating from neutral scenario to positive scenario and to ideal scenario		
Probability of Occurrence	Escalating from neutral scenario to positive scenario and to ideal scenario		
Value Chain Impacts	Operation and downstream		
Business Impacts	<ol> <li>The European Union has commenced trial implementation of the Carbon Border Adjustment Mechanism ("CBAM") and it is expected to be officially implemented in 2026. During the trial implementation phase, only CBAM related information is required to be reported and it is not required to purchase CBAM certificates. Upon the official levy in 2026, importers will be required to purchase CBAM certificates, and the price of CBAM certificates is expected to refer to the average auction price of EU ETS quotas. Although the regulatory scope of the CBAM transition period is mainly limited to the six high-carbon emission industries, it is expected to cover all industries and sectors covered by the EU ETS in 2030. The United States also plans to introduce the Clean Competition Act ("CCA") in 2024, and the glass industry will be subject to levy. With the implementation of carbon tariffs in Europe and the United States, it is expected that more regions will follow and put forward similar policy</li> <li>The French Energy Regulation Commission proposed new requirements in the "Tendering Regulations Relating to the Construction and Operation of Solar Power Facilities" (AO PPE2 PV Sol) for the simplified carbon assessment (ECS) of PV modules. Requirements for carbon footprint of products are becoming increasingly stringent, requiring mandatory ECS assessment for all PV projects exceeding 100kWp. Carbon footprint certification report issued by a professional organisation is also required. In the Asian market, the Korean government has taken the lead in proposing a carbon certification system for PV modules. It is believed that other Asian countries will also gradually put forward corresponding requirements in the future</li> </ol>		

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Risk Level: Market	
Financial Effects	<ol> <li>Increasing costs (in case of reducing carbon footprint, it will be more likely to tend to use green electricity, driving up the price of green electricity; carbon cost of exporting products will be increased after the PV industry is incorporated into the EU's carbon tariff mechanism; product carbon footprint certification costs)</li> <li>Increase in research and development costs (low-carbon/decarbonisation furnace technology, low-carbon products)</li> </ol>
Climate Action	1) By continuously reducing the unit energy consumption and electricity consumption, improving yield rate, increasing the proportion of distributed PV power generation and residual heat power generation in the total electricity consumption of solar glass production, and selecting more low-carbon raw materials/energy where applicable, the carbon intensity per unit of product was effectively reduced. Given that the Group's carbon emission intensity is far below the industry average, if module manufacturers raise the carbon intensity requirement for solar glass products in the future, it will further enhance the competitiveness of the Group's products
	2) Soda ash is one of the main raw materials. The supply of natural soda ash on the market has also increased compared with previous years. The energy consumption and carbon emissions of the natural soda ash production process are much lower than those of synthetic soda ash. Therefore, the use of natural soda ash is also a feasible way to further reduce the carbon footprint of solar glass products in the future
	3) During the past operating period, the Group was well ahead of its peers in furnace technology and low-carbon product research and development, and was the only enterprise in the industry with its own research institute. Therefore, it is expected that the Group will continue to maintain its technological and product research and development advantages in the future

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Risk Level: Market			
Specific Climate Risks	Consumption issues of renewable energy in the process of low-carbon transformation of China's power system		
Impact Term	Short to medium term		
Impact	Escalating from neutral scenario to positive scenario and to ideal scenario		
Probability of Occurrence	Escalating from neutral scenario to positive scenario and to ideal scenario		
Value Chain Impacts	Operation		
Business Impacts	<ol> <li>Stimulated by China's active promotion of the dual-carbon target and the sharp decline in module prices, China's new grid-connected PV installations reached 277.57 GW in 2024. Due to the large amount of renewable energy projects connected to the grid, some areas experienced more serious consumption problems than in previous years</li> <li>Increasing energy storage and power grid upgrades are effective measures to improve the power grid's capacity to consume renewable energy, but they still take time to implement. Therefore, in the short term, if the red line requirements for renewable energy consumption are maintained, the capacity of power grids in various regions may, to a certain extent, affect the arrangement of construction quotas for new solar farm projects in various places, thus making it more difficult for the Group to obtain relevant quotas</li> <li>As the proportion of renewable energy power market trading mechanism with three parallel mechanisms: green power trading, green certificate trading and carbon market trading, thereby guiding the gradual change of renewable energy from a fully guaranteed procurement mechanism to a market-oriented mechanism. In the early stages of the transformation, as the trading mechanism still needs to be improved, companies may face uncertainty about the amount of on-grid electricity and on-grid electricity prices when complying with local policies and grid requirements</li> </ol>		

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Risk Level: Market	
Financial Effects	<ol> <li>Decrease in revenue (due to the grid consumption capacity, the reduction in the new grid-connected capacity of solar farm projects, the uncertainties brought by the market-oriented electricity trading mechanism on the on-grid electricity and electricity price.)</li> <li>Increase in costs (energy storage costs, purchased electricity costs, labour costs)</li> <li>Increase in research and development costs (PV power forecasting system)</li> <li>Increase in capital expenditure (increase in energy storage ratio)</li> </ol>
Climate Action	<ol> <li>When investing in new projects, looking for areas with strong demand for electricity and high power consumption industries to fundamentally provide better protection for the future consumption of solar farm projects, as well as the supply and demand and price of electricity when participating in the market- based electricity trading</li> <li>The Group has its own development and construction team and thus can effectively control the development and construction costs. In the face of the same policy changes, such as market sale of electricity and increase in energy storage, the Group has certain advantages in depreciation and labour compared with industry peers</li> <li>Set up a talent team to develop and improve the PV power forecasting system, laying the foundation for securing more reasonable return for the project</li> </ol>

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Risk Level: Reputation			
Specific Climate Risks	Trade disputes (PV supply chain traceability)		
Impact Term	Short to medium term		
Impact	Escalating from neutral scenario to positive scenario and to ideal scenario		
Probability of Occurrence	Escalating from neutral scenario to positive scenario and to ideal scenario		
Value Chain Impacts	Upstream and operation		
Business Impacts	<ol> <li>Climate change drives the global investment in renewable energy, and countries are stepping up their effort to protect local enterprises, with an aim to promote the development of local solar manufacturing industry. As the production capacity located in China or owned by Chinese manufacturers has already accounted for approximately 99% of the global solar glass production capacity, there will be no actual impact on the operation</li> <li>With the continuous advancement of PV supply chain traceability, the demand for solar glass in overseas regions will be greatly increased. As of the end of 2024, the solar glass production capacity in overseas regions only accounted for nearly 8% of the total global solar glass production capacity. Therefore, the supply and demand of solar glass products in overseas regions is expected to be more favorable than that in China for a period of time in the future, which has a positive impact on the prices and profit margins in overseas regions</li> </ol>		
Financial Effects	<ol> <li>Increase in selling expenses (e.g. imposing trade tariffs) with effective avoidance of trade tariffs for individual countries/regions by flexibly arranging different production bases to supply products overseas. During the Reporting Period, the Group incurred no additional tariff expenses</li> <li>Increase in capital expenditure, accelerate overseas production expansion</li> <li>Increase in revenue and overseas product profit margin</li> </ol>		
Climate Action	1) As approximately 99% of the global solar glass production capacity is located in China or is under Chinese manufacturers' control, even with the imposition of trade tariffs, it would not be fully borne by solar glass manufacturers and there is a high probability that it will be passed on to customers. In addition, the Group has overseas production bases and actively adopts overseas capacity expansion strategies, which can effectively diversify the risks and reduce the impact of trade disputes. At the same time, the increasing uncertainty in the trading environment will significantly increase customers' demand for non-China product supply, thereby further enhancing the competitiveness of the Group's overseas production bases. If trade disputes and supply chain traceability continue, the Group expects its overseas sales of solar glass to maintain a premium and better profit performance than the domestic market for a period of time in the future		

#### **CLIMATE OPPORTUNITIES AND TARGETS**

#### **Climate-Related Opportunities**

2024 was the warmest year on record, with a number of climate change indicators hitting record highs and for the first time the global average temperature was 1.5°C above pre-industrial levels. Hot waves, floods, drought, wildfires and more powerful tropical cyclones have made millions of people face the climate crisis, resulting in economic losses of up to billions of US dollars. In view of this, accelerating the global energy transition, investing more in renewable energy, and promoting the transformation of the entire economic system towards low-carbon development is a matter of urgency, and clearly a commitment and action that are several times stronger than ever.

The "Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach" from the IEA raised the importance of low-carbon technologies that has been commercialised for mass production, particularly solar PV and battery chemistry technologies, in achieving the net-zero goal in 2050. On the other hand, it made downward revisions to the share of emission reductions from technologies under development and the share of new wind power contributions. Secondly, the IEA believes that due to the substantial increase in global solar PV and battery manufacturing capabilities, the amount of carbon reductions that they can contribute will increase significantly between now and 2030, and it is expected that solar PV power generation and electric vehicles will contribute one-third of the emission reductions by 2030.

Benefiting from the significant improvement in efficiency and significant cost reduction brought by technological development, solar PV has become the most important growth for renewable energy. In 2024, PV installation market remains high globally and in the PRC. The global installation is expected to increase by approximately 550 GW while the newly installed capacity in China recorded a year-on-year increase of 28% to 277.57 GW. According to the IEA, the world is expected to add over 5,500 GW of renewable energy capacity from 2024 to 2030, reaching a cumulative total of nearly 11,000 GW. Solar energy will account for 80% of renewable energy growth over the six-year period. Utility-scale solar will account for the majority of solar expansion, but distributed applications (including residential, commercial, industrial and off-grid projects) are expected to account for nearly 40% of solar additions. Due to the significant decrease in costs, the investment returns of solar farm projects are extremely attractive, especially the centralised and global distributed solar farms in emerging countries are expected to become an important new point of growth for PV installations. In addition, the mature PV markets, including China and India, are also expected to continuously increase the scale of PV installations to achieve the established carbon targets and meet the local electricity demand in a cleaner and lower-carbon manner.

#### **Indicators and Targets**

Xinyi Solar has always been active in disclosing its greenhouse gas (GHG) emissions. Our GHG emission indicators cover total emissions in Scope 1 and 2 as well as emission intensities related to solar glass production in Scope 1 and 2. As photovoltaic power generation requires only a very small amount of purchased electricity to maintain the continuous operation of its equipment (as electricity could not be generated by the photovoltaic power stations during night), the GHG emissions from the solar farm business operation do not have a material impact on the Group's total GHG emissions. Xinyi Energy, a subsidiary with 51.62% owned by the Group, has disclosed its ESG data every year. According to its reported statistics, the GHG emissions generated from the solar farm business operation only account for less than 1% of the carbon dioxide emission reduction that can be brought about by its electricity generation capacity, therefore, whether or not to incorporate the relevant data does not have any material impact on the Group's assessment of the performance of its GHG emissions and its impact on the global climate change, and therefore has not yet been included. This year we started to disclose the key categories of Scope 3, including Category 1 (Purchased goods and services), Category 4 (Upstream transportation and distribution) and Category 9 (Downstream transportation and distribution). We report three types of greenhouse gases, namely carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) with CO<sub>2</sub> being the dominant greenhouse gas in 2024.

#### **Our Methodologies**

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Standards adopted	"GHG Protocol Corporate Accounting and Reporting Standard" (2004) "GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard" (2011)
Measurement Methods	Operational control
Operational Boundaries	Four production sites in China: Wuhu of Anhui; Tianjin; Beihai of Guangxi; Zhangjiagang of Jiangsu One production site in Malaysia: Melaka

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#### Greenhouse Gas Emission Data

Scope	Unit	2024	2023	2022
Scope 1	Tonnes of CO <sub>2</sub> equivalent	5,432,651	4,490,174	3,003,130
Scope 2 (on geographical basis)	Tonnes of CO <sub>2</sub> equivalent	1,237,107	1,220,056	926,803
Scope 1+2	Tonnes of CO <sub>2</sub> equivalent	6,669,758	5,710,230	3,929,933
Scope 3	Tonnes of CO <sub>2</sub> equivalent	1,179,446	N/A	N/A
Scope 1+2+3	Tonnes of CO <sub>2</sub> equivalent	7,849,204	N/A	N/A

#### Greenhouse Gas Emission Indicators and Targets

In order to ensure the effective measurement of the handling process for climate change, the Group has set indicators for control and established targets accordingly. Based on our actual situation, we have specified climate-related risk indicators and formulated relevant targets in relation to GHG emissions. To ensure the successful achievement of the GHG emission intensity, the SDM Committee summarises the GHG emission targets and performance on a half-yearly basis, and reviews the targets and performance annually and assesses the need for revision.

#### Target Information

## XSG 1: Intensity of greenhouse gas emission of solar glass products in 2027↓ 15%<sup>Note 1</sup>, if excluding the impact of differences in the proportion of thin glass production in different years ↓ 7.0%<sup>Note 2</sup>



Note:

- (1) Compared to the base year 2022.
- (2) Compared to the base year 2022, if the following calculation method is adopted to exclude the impact of varying percentages of thin glass production over the years, the target is to strive for a reduction in greenhouse gas emissions per unit of product close to 7.0% by 2027. (During the Reporting Period, the Group's greenhouse gas emissions per unit of product decreased by 11.2% compared to the base year 2022. The relevant target has been achieved in 2023.)
  - (i) For calendering process: Calculate the greenhouse gas emissions per tonne of production based on the actual product output tonnage, and then multiply by the tonnage and area conversion factor of the base year to determine the greenhouse gas emissions per square metre of output.
  - (ii) For the deep processing procedure: Calculate the greenhouse gas emissions per square metre based on the actual product output in square metres.

#### **NEW TARGET**

As the above emission reduction target have been achieved ahead of schedule, the Group has proposed new target below.

NEW XSG 1:Achieve a reduction of 9% in greenhouse gas emissions (Scope 1+2) intensity per square metre of finished solar glass product by 2029 as compared to 2024		
Target type	Intensity	
Target	To reduce GHG emissions from own operations	
Unit emission - base period (2024)	4.57 kg CO <sub>2</sub> equivalent/m <sup>2</sup>	
Unit emission - target period (2029) NEW XSG 1	4.16 kg CO <sub>2</sub> equivalent/m²	

XSG 2: Increase investment in renewable energy, strive to reduce carbon dioxide emissions corresponding to the annual power generation of the solar farm projects held by the Group in 2027 by 50% Note 1

Target type	Absolute
Target	To provide more green electricity for the society and offset the GHG emissions in the production
	process of solar glass
Progress	
	2022 (base period) <b>3,639.8</b>
	2023 0 <b>4,149.8</b> †14.0%
	2024 o <b>5,245.4</b> †44.1%
	2027 (target period) 5,459.8
	(thousand tonnes)
XSG 2	

Note:

(1) Compared to the base period (2022)

# XSG 3: To support most of the countries in the world to achieve carbon neutrality by 2050 by increasing our solar glass production capacity and scaling up our solar power plant projects

Target type	Qualitative		
Target	To reduce CO <sub>2</sub> emissions		
Target progress	<ul> <li>The Group added 4,400 tonnes/day of solar glass production capacity, and the effective annual melting capacity increased by 15.7%. Limited by the current production technology of solar glass furnaces, fossil fuels are still needed for production, therefore, net zero emission has not yet been achieved in the production of solar glass. However, the greenhouse gas emission of a single piece of solar glass used in the 182 series 590W monofacial module is only 12.3kg and the green electricity generated by the module will result in approximately 13.7 tonnes <sup>Note 1</sup> of CO<sub>2</sub> emissions reduction over a 25-year life cycle. Therefore, solar glass production has a positive contribution to global energy transition and climate change mitigation and the difference in carbon emissions reduction from power generation and carbon emissions from production will further increase as modules become more efficient. In 2024, the greenhouse gas emission generated from solar glass production accounted for only 0.09% of the CO<sub>2</sub> emission reduction brought by the power generation of the PV module throughout its full life cycle</li> <li>The Group's solar farm projects generated 6.39 billion kWh of electricity, equivalent to a reduction of CO<sub>2</sub> emissions of approximately 5.245 million tonnes</li> <li>The CO<sub>2</sub> emission reduction from the annual power generation of the Group's solar farms projects was equivalent to 78.6% of the CO<sub>2</sub> emissions from solar glass production in the same period</li> </ul>		
XSG 3			

#### Note:

(1) Based on an assumption of 1,189 effective utilisation hours per year.

## Ecological-friendly and Sustainable Business Model

#### **Issues of focus**

- Environmental compliance
- Energy management
- Life cycle management
- Product carbon footprint
- Hazardous and non-hazardous waste emissions and management
- Air pollutant emissions and control
  - Water resource management
- Packaging material consumption and environmental-protection packaging
- Ecological impacts and alleviation actions



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By upholding the corporate mission of "Leading green new energy", Xinyi Solar focused its work on the PV industry for more than a decade and is now the world's leading solar glass manufacturer and China's foremost private utility-scale solar farm developer and owner. On the basis of promoting global carbon neutrality through supplying solar glass with high quality and stable green electricity (green electricity), the Group also spares no effort on minimising the effect to the environment and the consumption of resources during the production and operation process, including but not limited to the energy-saving and emission minimisation during the production process of solar glass, thus minimising the carbon footprint of products, and achieving the whole life cycle of green development. The Group also insists on building environmentally friendly solar farms, to reduce the impact of the development and construction process to the ecosystem, to protect the biodiversity and to create greater social, environmental and economic benefits for the local community through responsible operation of green power.

#### JOURNEY TO GREEN PRODUCTION OF SOLAR GLASS

#### Environmental Compliance

The Group complies with the Environmental Protection Law of the People's Republic of China and the environmental laws and regulations of the countries and regions in which it operates overseas, and developed institutional documents including the Environmental Management System (《環保管理制度》), regulating wastewater, waste gas and waste management. We have established and continuously optimised our environmental responsibility management system based on the ISO 14001 environmental management system. The Group obtained the green finance pre-issuance stage certificate issued by the HKQAA in 2019. Subsequent additions of the solar glass production sites also implement the same environmental management and protection practices, and therefore all the solar glass production bases of the Group in operation met the requirements of the HKQAA's Green Finance Certification Scheme during the Reporting Period.

The Group has established PV environmental protection office, which is responsible for coordinating and managing all environmental management-related activities in the production of solar glass. The PV environmental protection office updates the ESG working group on a quarterly basis on the performance of environmental-related core indicators, and proposes feasible proposals for the optimisation and improvement of the core indicators to assist the SDM Committee in monitoring the environmental management-related work of solar glass business. In order to improve the environmental protection supervision mechanism and ensure that the management of exhaust gas, sewage and waste materials complies with or exceeds the requirements of statutory emission standards, the Group has set up environmental protection management teams in each of its production bases to supervise and inspect the key environmental protection and emission equipment. The Group has also established the position of environmental protection officer to maintain good communication with environmental protection regulatory authorities and keep abreast of the latest environmental protection policies and regulatory requirements to ensure that all environmental protection indicators are in compliance with national and local standards. In addition, the Group undergoes regular external audits by certification bodies (e.g. TÜV SÜD) to ensure that the Group's environmental management system continues to meet international standards.

## Ecological-friendly and Sustainable Business Model

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Indicators	2024
Number of illegal or non-compliance incidents in the environmental field (cases)	0
Compliance rate of environmental monitoring (%)	100

#### **Green Production Base**

As solar glass production involves the consumption of energy (natural gas and electricity), water resources, raw materials (such as soda ash, ultra-clear silica sand) and other resources (such as packaging materials, wood, paper, plastic strips, etc.), the production processes generate greenhouse gases, air pollutants, hazardous and non-hazardous wastes and sewage and other pollutants. During the Reporting Period, the standard environmental protection facilities and the environmental protection practices implemented by the Group's solar glass production bases were as follows:

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Environmental goals	Environmental measures/ Environmental practices	Environmental performance indicators
Reduce greenhouse gas emissions	Use of clean energy (natural gas)	To reduce Scope 1 greenhouse gas emissions
	Residual heat power generation equipment to reduce purchased electricity <sup>note 1</sup>	To reduce Scope 2 greenhouse gas emissions
	Distributed rooftop PV power generation system to reduce purchased electricity note 1	To reduce Scope 2 greenhouse gas emissions
Reduce air pollutants	Desulphurisation device	To reduce SO <sub>2</sub> emissions
	SCR denitrification device	To reduce NO <sub>x</sub> emissions
	Electrostatic precipitator	To reduce particulates emissions
	Activated carbon/zeolite adsorption + desorption + catalytic combustion device	Enhancing the control of organised and unorganised gas emissions
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Environmental goals	Environmental measures/ Environmental practices	Environmental performance indicators
Improve utilisation of water resources	Water recycling system (sewage treatment and recycling system)	To reduce water intake by using recycled water for production
Improve resources efficiency	Regular maintenance and energy-saving upgrades	To reduce energy and resources consumption per unit of finished products by improving production efficiency and yield rate
Effective waste management	Waste recycling facilities	To reduce hazardous and non-hazardous waste emissions

Note:

(1) Purchased electricity is mainly coal-fired power, which causes greater environmental pollution

### **Energy Management**

According to the definition of direct energy consumption accounting scope in the Hong Kong Stock Exchange's "Reporting Guidance on Environmental KPIs", the Group's direct energy consumption mainly includes fuel used in the production of solar glass, purchased electricity, electricity generated from residual heat power generation system and distributed PV generation equipment and used in solar glass production, emergency electricity generation, and diesel used in forklifts and gasoline used in motor vehicles. Indirect energy consumption mainly includes purchased electricity used in the processing, stacking, transportation and loading processes. During the Reporting Period, the Group achieved effective reduction of raw carbon intensity of solar glass products and continued to improve the energy efficiency of its production process mainly through the following measures:

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	Measures	Corresponding environmental benefits of the measures	Performance in 2024
Effective reduction of raw carbon intensity	Use natural gas as the primary source of energy	Heavy oil and natural gas are the two most commonly used production fuels in solar glass production. With the same amount of calorific value provided to the furnaces, the carbon emission of natural gas is 27% <sup>Note 1</sup> lower than that of heavy oil. To effectively reduce raw carbon intensity of solar glass products, the Group has chosen natural gas as its primary production fuel	<ul> <li>The Group continued to use natural gas as its primary production fuel during the Reporting Period</li> <li>Scope 1 greenhouse gas emissions per unit of finished goods (in square metres) decreased by 5.6% year-on-year</li> </ul>
	Replace diesel forklifts with electricity forklifts	Reducing the amount of diesel used to lower air pollutants and Scope 1 greenhouse gas emissions	<ul> <li>During the Reporting Period, the production bases at Wuhu, Tianjin, Zhangjiagang and Beihai used electric forklifts</li> <li>The production bases at Zhangjiagang and Beihai enhanced their production output, while the consumption of diesel recorded a year-on-year decrease of 59.3% and 23.7% respectively</li> </ul>

Note: (1) Calculated on the basis of natural gas with a unit calorific value of 9,000 kcal/m<sup>3</sup> and heavy oil with a unit calorific value of 9,600 kcal/L

Me	easures	Corresponding environmental benefits of the measures	Performance in 2024
l and dist PV gen to optin	ng residual heat frooftop tributed power neration mise energy ructure	Boost the share of clean energy and reduce the use of purchased electricity, which will in turn reduce Scope 2 greenhouse gas emissions	<ul> <li>The total power generation from residual heat increased by 20.2% year- on-year during the Reporting Period, accounting for 19.8% of the Group's total electricity consumption for solar glass production</li> <li>The Group's total power generation from distributed PV power generation increased by 43.3% year-on- year during the Reporting Period, accounting for 9.8% of the total power consumption for solar glass production</li> <li>As of the end of the Reporting Period, 325 MW of photovoltaic power generation systems had been constructed at the production sites. During the Reporting Period, 315 MWh of electricity were generated</li> </ul>

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	Measures	Corresponding environmental benefits of the measures	Performance in 2024
Continuous enhancement in energy efficiency	Energy-saving renovation of production equipment and optimisation of production process, furnaces and production lines	Reduce natural gas consumption and power consumption of production lines by retrofitting production and environmental protection equipment in the deep-processing procedures, improving equipment efficiency, reducing equipment use frequency and optimising process parameters, etc. Continuous optimisation of production processes, furnaces and production line design through R&D to improve yield rate and reduce energy consumption intensity of products	• During the Reporting Period, all production bases have implemented various measures to increase energy efficiency, including reducing the consumption of energy and electricity, utilising energy in a highly efficient manner, reasonably adjusting the electricity usage at peak and trough, and saving of equipment costs
	ریالے Enhancing digital control	Utilising the digital system, real- time monitoring and analysis of power usage data of workshops and equipment, and analysis of the energy consumption data in production bases, while exploring the potential of facilities and equipment to reduce energy consumption and proposing feasible energy-saving solutions	<ul> <li>The production base at Wuhu added a new workshop-level intelligent control centre, resulting in cost savings of RMB6.63 million</li> </ul>



Note:

(1) Compared to the base period (2022)

During the Reporting Period, the energy consumption of solar glass per unit of finished product was 13.97 kWh/m<sup>2</sup>, a decrease of 16.5% from the base period.

### **NEW TARGET**

Given the early achievement of the aforementioned energy consumption targets, the Group has proposed new objective.

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NEW XSG 4: Strive to reduce energy consumption per square metre of finished solar glass products by 9% by 2029 as compared with 2024		
Target type	Intensity	
Target	To reduce energy consumption per unit of finished products	
Unit emission - base period (2024) 13.97 kg CO <sub>2</sub> equivalent/m <sup>2</sup>		
Unit emission - target period (2029) 12.71 kg CO <sub>2</sub> equivalent/m <sup>2</sup>		
NEW XSG 4		

### Water Resource Management

Effective water resource management is crucial to the sustainable development of business operations and the ecological environment. Xinyi Solar has been committed to contributing to the protection of water resources and established water conservation targets.



Our water consumption is mainly sourced from nature, and the consumption of water is mainly concentrated in the raw material mixing, equipment cooling, residual heat generation, as well as washing and cleaning during the tempering process in the production of solar glass. The Company integrates the concept of water conservation into the entire production and operation process, and promotes the lean management of water resources in all aspects by strengthening the analysis of water consumption, upgrading water-saving facilities and promoting water recycling. The Group's sewage recycling and treatment system (water recycling system) adopts different methods such as cooling circulation, separation and precipitation to recycle and reuse the production wastewater according to the impurities contained in the water after the calendaring process and tempering process. The Group continuously optimises the water recycling system through innovation and upgrade of the original equipment, adding new water purification system, enhance the usage frequency of sewage processing equipment and carry out regular cleaning on sewage tanks, in order to further enhance the utilisation rate of recycled water and to maximise the usage of recycled water in production. During the Reporting Period, the utilisation rate of recycled water of the Group increased by 0.3 percentage point to 96.3%. The Group will continue to strive to improve the efficiency and purification capacity of the sewage treatment system, with the target of increasing the utilisation rate of recycled water to 100% for some processes, so as to achieve the long-term goal of "zero waste except normal evaporation and sedimentation tank loss".

XSG 6: Obtaining and using water resources in a responsible and sustainable manner to further improve the utilisation rate of recycled water and striving to achieve zero wastage except normal evaporation and sedimentation tank loss	
Target type Qualitative	
Progress	In 2024, the water recycling rate was 96.3%

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We regularly identify and assess water resources at each of our major operating sites based on World Resources Institute ("**WRI**") data. We have re-identified the water resources status of each production site based on the latest information from the WRI database.

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	Geographic location of production sites	Baseline Water Pressure	
1	Wuhu City, Anhui Province	Low to medium	
2	Tianjin City	Medium to high	
3	Beihai City, Guangxi Zhuang Autonomous Region	Medium to high	
4	Zhangjiagang City, Jiangsu Province	Medium to high	
5	Melaka City, Malaysia	Low	

The Group's solar glass production bases are located in the PRC and Malaysia, with no production capacity located in areas with high/extremely high baseline water pressure. In addition, during the last three years, an average of approximately 95% or more of the water used in the production could be met through recycled water, and most of the freshwater intake come from natural water sources, thus the reliability on fresh water (in particular municipality water supplies) is very low. As the Group achieved efficient water resources management and it is still being optimised continuously, the Group is not currently under or expected to be under pressure to obtain water resource. Nevertheless, the Group is still actively adopting various water-saving measures to further reduce the water consumption intensity, in order to conserve the water resource of the earth, and to effectively enhance its ability to resist water resource risks.

### **Case studies**

XSG 6

During the Reporting Period, by adjusting the water replenishment method for further processing, implementing water intake equipment modification and optimising the water discharge method for certain equipment, and re-treating the effluent discharged from tempering to enhance the water recycling rate, the water consumption intensity of solar glass products decreased by 14.7% year-on-year to 0.0092 m<sup>3</sup>/m<sup>2</sup>. The self-developed recycled water treatment system in the tempering workshop of the Wuhu Jiangnan Base is estimated to bring about cost savings of approximately RMB980,000 for the Group. The Wuhu Jiangbei base ran recycled water treatment in its tempering workshop in 2024, using natural water sources and saving 3.6 million tonnes of tap water.

### **Emissions and Waste Management**

Xinyi Solar regularly identifies and updates legal and regulatory requirements to ensure that the company's operation compliance. With reference to relevant laws and regulations, the company has formulated system documents such as the "Waste Management Regulations", "Industrial Solid Waste Pollution Prevention and Control Responsibility System", and "Pollution Source Automatic Monitoring Equipment Management System", which clearly stipulate the specific management requirements for various types of emissions and wastes and formulate relevant procedural documents.

Regarding the major pollutants identified, the Group strictly complies with the requirements of the national and local environmental protection-related laws and regulations in the countries where it operates, and adopts the treatment techniques, disposal methods and monitoring measures under the supervision of local environmental protection regulatory authorities, to ensure the Group complied with the national, local and/or industry in respect of the discharge and treatment of pollutants during the Reporting Period, and implemented the highest standards among them.



### Air Pollutant Management

During the Reporting Period, all provinces in the PRC fully implemented the "Glass Industry Air Pollutant Emission Standards (GB26453- 2022)". Anhui Province, where the Group's production capacity is most concentrated, requires the implementation of the more stringent local standards of Anhui Province for new production capacity. For Wuhu Jiangbei Production Base, it is further required to meet the emission standards of Class A enterprises in the flat glass and electronic glass industries, that is, the emission limits of SO<sub>2</sub>, NO<sub>x</sub> and particulate (smoke and dust) tightened to 50mg/m<sup>3</sup>, 200mg/m<sup>3</sup> and 10mg/m<sup>3</sup>, respectively. Existing production capacity is also required to implement more stringent emission standards from October 2024.

### Applicable standards

### **Production bases in China:**

- Integrated Emission Standards of Air Pollutants (GB16297-1996) (National Standard)
- Comprehensive Air Pollution Control Plan for Industrial Furnaces and Kilns (National Standard)
- Emission Standard of Air Pollutants for Glass Industry (GB26453-2022) (Industry Standard) or local Standards of Anhui/ Jiangsu/Tianjin/Guangxi Zhuang Autonomous Region whichever are higher
- Industry standards:  $SO_2 \leq 200 \text{ mg/m}^3$ ;  $NO_x \leq 400 \text{ mg/m}^3$ ; smoke and dusts  $\leq 30 \text{ mg/m}^3$  or the local standards

### Production base in Malaysia:

• National standard under the Environmental Quality Act 1974 on the emission of exhaust gases from glass furnaces:  $SO_2 \leq 800 \text{mg/m}^3$ ;  $NO_2 \leq 800 \text{mg/m}^3$ ; smoke and dust  $\leq 50 \text{mg/m}^3$ 

### Main pollutants

 $SO_2 \sim NO_x$  and particulate matter (smoke and dust).  $SO_2$  and  $NO_x$  are mainly generated in the melting process, while particulate matter is generated in all processes from raw material loading to packaging of finished products

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### Measures

- Use natural gas as fuel
- Adopting oxygen-enriched technology for production
- Equipped with desulphurisation, denitrification and dedusting devices along with spare devices
- Clean, maintain, inspect and replace devices regularly
- Upgrade and renovate existing devices
- Adjust dose of usage of catalysts and replace catalysts regularly
- Enhance operation of precipitator, reduce unorganised emissions of workshop dust
- Arrange water sprinkling on roads regularly to reduce fugitive dust in working areas

### **Monitoring methods**

- Internal self-inspection and routine exhaust gas emission monitoring and inspection are mainly controlled by the designated environmental protection personnel, and shared by the equipment department, calendaring and production department and third party operation and maintenance unit
- An online monitoring system is installed for flue gas at the exhaust ports and monitoring spots are set up for 24-hour ongoing monitoring, with the monitoring data uploaded through the CEMS system. The Wuhu, Zhangjiagang, Tianjin, Beihai and Melaka plants are connected with their respective local environmental regulatory departments, and are monitored by the government to ensure their emission data are up to standards
- During the period when the CEMS equipment is repaired, replaced or cannot be operated normally for any reason, the normal operation should be resumed within a time limit in strict accordance with legal and regulatory requirements. If the time limit is exceeded, the third-party operation and maintenance unit will report the data through manual sampling according to the required frequency.

# XSG 5: Adopting strict standards to regulate and manage the emissions of exhaust gas, and striving to surpass national standards

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Target type	Qualitative
Progress	Reduction of $SO_2$ , $NO_x$ and particulates (smoke and dust) emissions by 85.6%, 93.9% and 96.8%, respectively
	Reduction of SO2     Reduction of NOx     Reduction of particulates (smoke and dust)
	74.4%         85.6%         90.3%         92.6%         93.9%         94.4%         95.7%         96.8%
XSG 5	2022 2023 2024 2022 2023 2024 2022 2023 2024

### Wastewater Discharge

### **Applicable standards**

### **Production bases in China:**

Level three standard under the Integrated Wastewater Discharge Standard (GB8978-1996), or local standards whichever is higher

### Production base in Malaysia:

Standard A under the Environmental Quality (Industrial Effluents) Regulations 2009

### Main pollutants

Production wastewater that cannot be recycled after being recycled several times during the production process, and domestic water

### Measures

- Sewage from tempering is recycled after treatment through the sewage treatment and collection system and the efficiency of purification is enhanced using filter presses, water purifier and a water agent, thereby improving the water recycling utilisation rate
- Production sewage, rainwater and domestic sewage that cannot be reused are collected centrally and transported to urban sewage treatment plants through designated channels after sedimentation/filtration/septic tank/grease trap treatment

### **Monitoring methods**

- Production and equipment departments conduct tests and records the concentration of sewage at discharge point at predetermined frequency, which are verified by designated environmental protection personnel and the person-incharge of the department
- The production bases in China are continuously monitored 24 hours a day through an online real-time sewage discharge monitoring system and are subject to real-time monitoring by local environmental protection authorities. The production base in Malaysia is required to submit sample analysis to regulatory departments regularly
- Qualified third party inspection agencies are commissioned to conduct monitoring and quarterly sampling on the main outfall of sewage, sources of pollution in the plant, sewage tanks and sewage processing and collection system, to ensure that the key indicators are met: pH value (pH), chemical oxygen demand (COD<sub>cr</sub>), biological oxygen demand (BOD<sub>c</sub>), suspended solids, ammonia nitrogen, animal and vegetable oil

### **Hazardous Waste**

### **Applicable standards**

### **Production bases in China:**

Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes (Revised in 2020)

Standard for pollution control on the non-hazardous industrial solid waste storage and landfill (GB18599-2020)

Technical specification for setting identification signs of hazardous waste (HJ1276-2022)

Control of Environmental Pollution by Solid Wastes (GB18597-2023)

National Catalogue of Hazardous Wastes (2021 edition)

Management Measures for Hazardous Wastes Movement

### Production base in Malaysia:

Environmental Quality (Scheduled Waste) Regulations 2005

### Main pollutants

Main hazardous wastes include waste denitrification catalysts, waste packaging barrels, waste mineral oil, waste paint, waste oil brushes/gloves, waste chemical reagents and waste activated carbon.

### Measures

- The Group has established a waste management system to manage waste with reference to requirements of related regulations. Each department collects, sorts, and transports waste within the scope of its control to designated locations within the factory for storage and disposal in accordance with applicable regulations and internal systems;
- Develop a hazardous waste management plan and file it with local ecological and environmental protection department.
   For hazardous wastes, enterprises are required to specify a transfer plan in annual declaration plan, confirming the qualified agency and types and quantity of hazardous wastes to be disposed of, and to be filed with local ecological and environmental protection bureau by the relevant unit. In case of transfer outside the province, enterprises are required to report to the provincial ecological and environmental protection bureau and upon receiving approval, the qualified agency should arrange vehicles to conduct the transfer. After the hazardous waste is transferred, the enterprise is required to register the transferred hazardous waste data information in the local solid waste management information system, and confirmation of receipt is required from the receiving party;
- Some of the waste packaging barrels that can be recycled for reuse will be handed over to the manufacturer for recycling.

### Monitoring methods

• Hazardous waste store will only be opened in prescribed time and access to which must be arranged by a designated person. No other personnel may enter the store without permission. All hazardous solid wastes are properly pre-treated before storage to prevent dumping and leakage during disposal.



### **Non-Hazardous Waste**

### **Applicable standards**

### **Production bases in China:**

Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes (Revised in 2020)

Standard for pollution control on the non-hazardous industrial solid waste storage and landfill (GB18599-2020)

### Production base in Malaysia:

Environmental Quality (Scheduled Waste) Regulations 2005

### Main pollutants

Main non-hazardous wastes include sludge (glass powder) generated after the production sewage passes through the sedimentation tank, desulfurized gypsum, saltpeter ash and dust collected by environmental protection equipment, raw material waste ash, construction waste, and broken glass and waste packaging materials generated in the production process.

### Measures

The Group has established a waste management system to manage waste with reference to the requirements of relevant regulations. Each department collects, sorts, and transports waste within the scope of its control to designated locations within the factory for storage and disposal in accordance with applicable regulations and internal systems.

- Construction waste: Recycle and reuse by the manufacturer
- Dust and sludge: Reduce discharge of solid wastes through reusing after deep processing, engage qualified agencies to dispose those which is unfit for reuse
- Disqualified and broken glass: reuse in production after recycling
- Domestic refuse: Collected and cleared by sanitation service agents
- Discarded packaging materials and discarded electronic equipment: Recycle/dispose by legal means

### **Monitoring methods**

• Non-hazardous wastes are sorted and stored in designated locations, whereas the relevant departments are responsible for statistics and the material control team is responsible for supervision



### **UPDATED TARGET**

NEW XSG 10

XSG 10: Except for temporary increases due to incidental factors (such as the construction<br/>of new production bases or new production lines leading to an increase in<br/>construction waste), the target is to maintain a downward trend in the unit<br/>hazardous and non-hazardous waste generation intensity of solar glass products in<br/>the next five years by reducing material consumption, stengthening recycling and<br/>utilisation, and improving the yield of finished productsTarget typeQualitativeTargetReduce hazardous and non-hazardous waste generation



### Noise

In order to reduce noise hazards, the Company, when planning and designing new production bases, carried out reasonable layout of production workshops, selected low-noise equipment, purchased sound-absorbing materials for workshops, and used special equipment including noise enclosures to reduce noise sources. The Company's noise hazards were properly controlled, and no negative incidents with significant impact due to noise factors during the Reporting Period.

### **Applicable standards**

### **Production bases in China:**

Emission Standard for Industrial Enterprise Noise at Boundary (GB12348-2008), Category 3 Standards, the limit for daytime is 65dB(A) while the limit for nighttime is 55dB(A)

### Production base in Malaysia:

Occupational Safety and Health (Noise Exposure) Regulations 2019, not exceeding 82dB(A)

### Main pollutants

Mainly generated from wind turbines used in raw material feeding, mixing, melting, calendaring and annealing processes as well as residual heat generators

### Measures

- Noise insulation for plants
- Shock absorption
- Enhancement of equipment maintenance
- Improvement of greening of the plant area, planting tall evergreen trees in the plant boundary area, stepping up greening efforts around the workshops

### **Monitoring methods**

• Annual inspections by qualified third parties

### Green Actions in Non-production Section

The Group adheres to the concept of "green manufacturing" in its production process, implements established environmental protection practices and proactively adopts all feasible measure on energy-saving and reducing consumption measures to effectively reduce the unit consumption of energy, water resources and other raw materials, as well as to minimise air, water, solid waste and noise pollution. The Group has also taken the initiative to incorporate the concept of sustainable development into every non-production process, from site selection and construction to daily operations, striving to achieve better environmental benefits. Meanwhile, the Group encourages employees, suppliers and other business partners to adopt sustainable development concept similar to the one adopted by the Group, and to conserve resources, reduce waste in their daily lives/operation, and take move proactive actions to reduce carbon footprints and minimise the negative effect to the environment, so as to achieve green and low-carbon development.

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Biodiversity	<ul> <li>China attaches great importance to biodiversity protection and has divided more than 30% of land resources into ecological protection red lines. Xinyi Solar strictly abides by the red line system of ecological protection</li> <li>Before the establishment of a solar glass production base, a professional environmental assessment agency will be commissioned to conduct investigation and assessment on the surrounding ecological environment of the proposed project, and an environmental impact report will be prepared. After seeking public opinions and reviewing by experts, the report will be submitted to the local ecological environment bureau</li> <li>All of the Group's solar glass production bases are located in industrial parks, which are industrial land and do not involve ecological function safeguard areas with important functions such as water source conservation, biodiversity maintenance, marine ecological stabilisation, nor do they belong to fragile ecological environments such as soil and water erosion and land sandification. Prior to the preparation, the Group will evaluate and assess the current situation and impact on the local ecological environment, including vegetation, wild animals, land, atmosphere and hydrology through professional institutions to ensure that no rare and endangered species of wild animals and plants are involved in the area. The construction and plants in the region, and the impact on the land, atmosphere and hydrological environment is controllable and in compliance with national and local environmental protection laws and regulations</li> <li>Upon completion of the construction of the production park, the Group has enhanced the greening of the plant area to gradually restore and improve the biomass in the park and improve the quality of the ecological environment</li> </ul>
Green office	<ul> <li>Actively advocate the concept of "green office", and call on employees to make good use of office resources to avoid unnecessary waste of resources</li> <li>Fully implement the online OA system for purchase and approval to replace traditional paper-based purchase forms, and gradually realise paperless office</li> <li>Make reasonable use of indoor lighting according to natural light conditions and develop a good habit of turning off lights when not in use</li> <li>Prohibit the use of air conditioners in public places during non-office hours, reasonably set the temperature of air conditioners, and eliminate the idling of air conditioners</li> <li>Office equipment such as computers, printers and water dispensers should be turned on when in use and turned off when idle, and long-term standby is prohibited</li> </ul>
Green packaging	<ul> <li>The Group actively promotes "replacing wooden pallets with iron pallets" and paperless packaging to effectively reduce the use of packaging materials per unit of solar glass products</li> <li>The Group was committed to solving the problem of matching the size of iron pallets with different products, and optimised the design of paperless packaging to ensure that the adoption of environmentally friendly packaging does not affect the appearance, transportation, storage and use of products, so that more customers will choose green packaging</li> <li>In 2024, the consumption of unit packaging materials decreased by 7.7% year-on-year to 61 g/m<sup>2</sup>. Iron pallet usage in domestic sales increased to 86.9%</li> </ul>

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### Product Life Cycle Management and Product Carbon Footprints

The PV Recycle Industry Development Centre under the PV Committee of the China Green Supply Chain Alliance (中國綠色供應 鏈聯盟光伏專委會光伏回收產業發展合作中心), based on empirical data on the power degradation of PV modules in China's typical climatic conditions, predicts that the cumulative amount of PV modules retired in China will reach 1 million tonnes in 2030 and 55 million tonnes in 2050 under a regular retirement scenario, and 4 million tonnes by 2030 and 66 million tonnes by 2050 under early retirement scenario. In the face of China's "dual-carbon" goal and the upcoming wave of waste PV module, the Ministry of Industry and Information Technology has proposed to accelerate the transformation and upgrading of the traditional manufacturing industry, establish a sound carbon emission accounting system, and shore up the establishment of a product carbon footprint management system. Six ministries and commissions, such as the National Development and Reform Commission, the Ministry of Industry and Information Technology, and the Ministry of Ecology and Environment, have jointly released a guidance document, which requires the construction of a recycling system of photovoltaic equipment in a productive way, with focuses on:

- 1) green design during the product design phase;
- 2) establishment of a sound mechanism of responsibility for the handling of decommissioning equipment;
- 3) improvement of the equipment recycling system;
- 4) acceleration of the cultivation of the industrialised capacity of detailed dismantling and high-level regeneration and reuse of decommissioning photovoltaic equipment, and so on.

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Coupled with the rising requirements and standards for carbon footprint certification of photovoltaic products in various countries and regions around the world, such as the European Union, the United States and South Korea, the Group has taken a proactive approach to exploring a sustainable lifecycle management model applicable to solar glass products based on the existing product management and value chain management models. By taking into account the changes in policies and market trends, the Group is committed to low carbon product development, responsible procurement, green and efficient production, environmentally friendly packaging, and choice of transportation methods, in order to lower the carbon footprints of solar glass products and realise the green and low-carbon development of their entire life cycle.



Although solar glass accounts for a relatively low percentage of the carbon footprint of PV modules, it is not the main source of the carbon footprint of PV modules. For example, based on the French carbon footprint requirement for low-carbon PV modules (less than 740kg CO<sub>2</sub>/kW), the Group's solar glass products accounted for 3% and 5%, respectively of the carbon footprint of single-glass and double-glass PV modules in 2024. As the EU Carbon Border Adjustment Mechanism and the U.S. Clean Competition Act are expected to come into force or increase their coverage in the future, PV products exported to the region may need to comply with the relevant carbon footprint verification requirements.

The completed carbon footprint of the entire life cycle of PV glass products is illustrated below:

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Product design and R&D	<ul> <li>Since the light transmittance and physical strength of solar glass have a substantial impact on the power generation efficiency and service life of PV modules, improving the transmittance, physical strength and other parameters of the product can help PV modules increase the power generation throughout their whole life cycle, bringing more considerable carbon emission reduction to the society</li> <li>As the only solar glass company with its own glass research institute, Xinyi Solar has led the launch and commercial mass production of high efficiency and low-carbon new products (such as thin glass, large format, ultra-high transmittance products) for large-scale applications in the solar glass industry in recent years</li> <li>The double glass module can generate additional 10-15% power generation from the back of the module and extend the service life by about 5 years, based on the full life cycle power generation, a single 182-size double-glass module can reduce CO<sub>2</sub> emissions by 32-38% more than a single-glass module</li> </ul>	
Responsible procurement	<ul> <li>Pay great attention to the performance of suppliers in occupational safety and health management, environmental protection, business ethics, respect for and protection of human rights and labour rights, and ensure that their ESG-related areas other than products, services and costs also meet the Group's standards by formulating and requiring all suppliers to sign and confirm the "Supplier Code of Conduct" to regulate their relevant behaviors</li> <li>Comply with the "Conflict Minerals Procurement Policy" and require both suppliers and their upstream to comply with the same policy and not use minerals from conflict mining areas</li> <li>Ensure that the suppliers' environmental management-related activities and their products comply with the requirements of the Group's environmental policy, RoHS and REACH, etc. by entering into "Green Purchasing Agreements". With the increase in the supply of natural soda ash, the Group will be able to select and more easily procure raw materials with lower carbon emissions in the future, so as to reduce carbon emissions in the raw material procurement and pre-processing processes</li> <li>Global supply channels are established to ensure supply stability, enhance procurement efficiency and environmental benefits for upstream sectors</li> </ul>	

Green production	<ul> <li>Reduce carbon intensity of products and enhance other environmental benefits through continuous optimisation of energy conservation and emission reduction measures, research and development, and continuous improvement of production efficiency and yield ratio</li> <li>Continue the research and development investment in glass furnace technology, strive to break through the dependence of existing technologies on fossil fuels, and help decarbonise solar glass production after retrofitting the existing furnaces, the current price of hydrogen for solar glass production after retrofitting the existing furnaces, the current price of hydrogen, the availability and stability of low-carbon hydrogen fuels (e.g. green hydrogen), as well as production safety considerations, do not make it suitable for use as a primary fuel in the commercial production of solar glass. Therefore, the realisation of decarbonisation or low-carbon production still requires further attention to technological development, the changes in the cost and supply capacity of alternative fuels</li> <li>Natural gas is used as the fuel for production to lessen our carbon emissions. At the same time, the unit energy consumption of the Group's solar glass products is at the leading level in the industry, and the energy consumption accounts for more than 80% of the carbon emission intensity of the product, so lower unit energy consumption means lower product carbon footprint</li> </ul>	
Transportation	<ul> <li>Water transportation is increasingly used in addition to continued optimisation for routes and modes. The Group's Wuhu and Beihai production bases have their own terminals, while other production bases are close to local cargo terminals and prefer areas with convenient waterway transportation when identifying new production bases. Although the transport sector accounts for a relatively small portion of our product carbon footprints, the Group has taken the initiative to adopt more low-carbon transport methods</li> <li>Explore road-rail intermodal transportation</li> <li>Choose low carbon transport providers as far as possible to build a green transport chain</li> </ul>	
Customer management and product usage	<ul> <li>Quality control is carried out according to ISO9001:2015, the solar glass products have obtained China's National Compulsory Product Certification (CCC), and can meet RoHS and REACH requirements</li> <li>Based on the data provided by SGS in their earlier assessment of the Group's overseas production bases, it has been determined that solar glass products exhibit zero carbon emissions during their usage. Furthermore, as a vital component of photovoltaic modules, solar glass contributes significantly to reducing carbon dioxide emissions through photovoltaic power generation. For instance, a 182-size single-glass module, throughout its 25-year lifespan, generates green electricity that leads to a reduction of 13.7 tonnes of carbon dioxide emissions for our planet</li> </ul>	

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Product recycling and reuse	<ul> <li>The theoretical recoverability of solar glass products amounts to higher than 98%, and the theoretical reuse rate reaches 95%, so theoretically, the possibility of recycling is high. However, as a solar glass manufacturer, the main reasons why closed-loop management cannot be completed at present are: Solar glass products need to be processed by PV module factories after leaving the factory, so when the product is applied to PV module factories after leaving the factory, so when the product is applied to PV modules and after a 25-30 year use cycle and up to the module retirement. We, as a solar glass manufacturer, can no longer trace the products, so there is no objective basis for assuming the main responsibility for recycling. For the recycling of solar glass products in the future, we can participate in the following ways:</li> <li>(1) Collaborate with module enterprises on the "reuse" after they have completed module recycling and separated solar glass. Depending on the condition of the recycled solar glass, the more intact solar glass can be used for reprocessing, while the broken glass can be used as raw material for production. During the Reporting Period, we communicated with some customers about the possibility of such cooperation, but no actual cases have yet been implemented</li> <li>(2) The guidance document issued by the National Development and Reform Commission and other relevant departments promotes the involvement of third-party organisations in professional recycling services and the adoption of a "one-stop" approach. Based on the actual development of the PV recycling industry in China during the Reporting Period, it became evident that professional third-party enginisations and integrating a certain percentage of this recycled solar glass into the Group's own solar glass production. This approach aims to achieve improved environmental and economic performance through the secondary utilisation of resources. It is important to note that the PRC is still in the phase of res</li></ul>	

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### ACHIEVEMENT OF A MUTUALLY BENEFICIAL RELATIONSHIP BETWEEN SOLAR FARMS AND THE ECOLOGY

PV power generation plays a crucial role in driving and ultimately realising the global energy transition and carbon neutrality. Considering that centralised solar farms utilise significant land resources and are responsible for supplying green electricity, their development, construction, and operation can have long-term impacts on local communities, ecosystems, and economies. Therefore, it becomes even more important for developers and operators to embrace the principles of sustainable development. They should strive to minimise and prevent negative impacts on the ecological environment during development while ensuring a stable supply of green electricity during operation and maintenance. This approach aims to enhance the local atmosphere, water, and natural environment, bolster climate resilience, and promote the transformation towards a green and low-carbon power structure.

Since its investment in the development of the first centralised solar farm in 2014, the Group has never forgotten the mission of "Leading green new energy". The Group has adopted a sustainable development model that emphasises "Coexistence with society and the environment" during solar farm development. Actively exploring the "PV+" model, the Group strives to protect and improve the ecological environment and fully utilise resources and space. These endeavors have showcased multiple successful examples, demonstrating how photovoltaic power generation can create a win-win-win situation for the local economy, the environment, and society as a whole.



The Group strictly adheres to the principle of "Not sacrificing the ecological environment and not destroying the ecological balance" throughout the entire process of project development, construction, and operation. As a result, not only have completed projects shown no detrimental effects on the ecological environment, but many of them have also undergone ecological restoration and renovation in areas previously affected by pollution or ecological damage. This has led to the revitalisation of the surrounding ecological environment, creating a more favorable habitat for plants and animals. For instance, the Huainan Project and the Huaibei Project have successfully implemented ecological restoration and landscape enhancement in former coal mining subsidence areas, which restored the cleanliness of the water surface as well as planted flowers and vegetation in the surrounding area, contributing to the restoration of biodiversity. During preliminary site investigations, the Group effectively avoids areas designated as ecological red lines or other protected resource areas to avoid the impact or harm from projects on the habitats of rare and endangered species. In the design and development phase, the Group carefully selects the most suitable approach that aligns with the local ecological environment, implementing effective measures to minimise changes and impacts on the land, air, and water systems. After construction, a series of restoration measures is employed to rehabilitate vegetation and improve the overall environment. The operational process of our projects does not involve the consumption of fossil fuels, thus no adverse impacts occurring on the ecosystem.

XSG 13: Protect local natural resources and biodiversity while developing and building solar farms, and insist on building environmentally friendly solar farms	
Target type	Qualitative
Progress	Among the 300MW grid-connected capacity newly added, all of them were developed and constructed in an environmentally friendly manner. The accumulated grid-connected capacity amounted to 6.2GW while agricultural- PV complementary/fishery-PV complementary solar farm projects accounted for nearly 64%
XSG 13	

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XSG 15: Select, design and develop solar farm projects with full consideration of the impact of climate factors to enhance the project's climate risk resilience, so as to ensure a more stable supply of green electricity to meet the demand of the community	
Target type	Qualitative
Progress	During the Reporting Period, the loss of electricity due to natural risk factors accounted for less than 0.02% of the total power generation
XSG 15	I

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The frequent occurrence of extreme climate events has had significant impact on the economy and the safety of people's lives and property. Without effective measures to mitigate climate change, these events will become even more frequent and intense, posing a greater threat to society, the economy, and public well-being. PV power generation has emerged as the most economically competitive renewable energy source, thanks to cost reductions and efficiency improvements over the years. It represents the most promising alternative to coal power in the future energy mix. Replacing high-carbon fossil fuels with renewable energy sources is vital for achieving a low-carbon energy transition and strengthening our ability to tackle climate change and its existential crisis. The development, construction, and operation of solar farms not only provide economic benefits such as fixed asset investments, tax contributions, and increased employment but also deliver various social advantages through the "PV+" model.

- Before project development, professional institutions will be commissioned to conduct environmental impact assessment to ensure that the project does not involve ecological protection areas, ecological red lines and natural reserves, scenic spots and drinking water source protection areas
- Environmental protection acceptance procedures will be conducted upon completion of project construction
- The space beneath solar panels is utilised efficiently for the breeding or cultivation of shade-loving animals and plants. This approach aims to enhance the ecological environment while simultaneously improving comprehensive economic benefits
  - Over the past 10 years, the Group has implemented various "PV+" development models, such as integrating fishery, agriculture, and floating power stations in areas affected by coal mining subsidence. These approaches were tailored to the unique ecological environments of different projects, maximising the advantages of the original ecosystem and minimising biodiversity impacts during project development. The Group aims to ensure the satisfaction of regulation procedures by employing measures such as vegetation restoration and restore and enhance the local environment

# Environment

Economy

- In 2024, the total power generation capacity reached 6.39 billion kWh, 100% of which was photovoltaic power. This capacity is sufficient
  to fulfill the annual green power requirements of nearly 2.13 million households, resulting in a reduction of 5.245 million tonnes of
  carbon dioxide emissions by replacing an equivalent amount of coal-fired thermal power.
  - The process of photovoltaic power generation does not consume energy or water resources. Therefore, providing green electricity through photovoltaic power can effectively decrease the consumption of non-renewable resources, reduce air and water pollution caused by coal-fired power generation, and contribute to the well-being of more local residents where it operates
- We support climate change mitigation efforts, enhance the resilience of cities to climate change, and assist China in achieving its energy transformation and dual-carbon objectives Society



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- Accumulated fixed asset investment of RMB21.2 billion
- Solar farm segment revenue of RMB3.02 billion
- Tax contribution from the solar farm segment reached RMB440 million
- Tax contribution per MW of RMB71,000

### **Issues of focus**

- R&D investment
- Patent and intellectual property protection
- Establishment of sustainable supply chain
- Information security

- Procurement efficiency
- Supply chain management

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- Supply chain risk identification and monitoring
- Sales and after-sales service management
- Customer management and complaint handling system
- Community contribution and engagement



Suppliers, customers, and the community are important stakeholders for us, and they play an indispensable role in the sustainable development of Xinyi Solar. Therefore, in our business collaborations and community involvement, we insist on a win-win approach. Through responsible procurement, provision of high-efficiency and low-carbon products, and active participation in community building by utilising our own business expertise, we share our sustainability principles with suppliers, customers, other business partners, and the community, and encourage them to adopt the same, thereby helping the value chain to decarbonise and building climate resilience in the community.

### SUSTAINABLE SUPPLY CHAIN MANAGEMENT

International requirements for sustainable supply chain management are becoming increasingly stringent, with developed countries and regions such as the European Union, the United States, the United Kingdom, and Germany have successively issued policies related to green supply chain management. As nearly half of the end demand for PV industry originates from overseas, the international community places significant emphasis on the supply chain management of PV enterprises. Specifically, there is a strong focus on the constraints, evaluation, and audit mechanisms applied to suppliers regarding environmental management, human rights protection, labour rights, business ethics, and supplier performance. As a company with production capabilities in the PRC and overseas and products sold globally, the Group recognises the significance and potential opportunities associated with a sustainable supply chain for its long-term development. Consequently, the Group is committed to extending its concept and requirements for sustainable development to the broader supply chain. Supply chain management holds great importance for us. While procuring high-quality raw materials and services at competitive terms, and safeguarding the safety and stability of our supply, the Group steadfastly uphold the standards of our suppliers in terms of labour management, human rights protection, environmental governance, and business ethics. Our aim is to mitigate any adverse impacts on the environment and society throughout the supply chain.

### Management Policy

The Group adopts direct supply of natural gas and has established stable natural gas supply channels at each of its production bases. For the procurement of core raw materials like soda ash and silica sand, centralised procurement takes place through the Group's ERP system, while subsidiaries may be involved in procuring goods and services that are not core raw materials for production. As a result, the Group has developed a sustainable procurement policy, which is regularly reviewed and enhanced. This policy includes standardised processes and criteria for evaluating, selecting, managing, and assessing suppliers, focusing on non-economic aspects such as environmental impact, social responsibility (including human rights protection), and governance (including business ethics) and requirements for qualified products and services. Departments responsible for centralised procurement, executives of subsidiaries and all relevant employees involved in procurement decisions are required to comply with the established human rights policies, the "Conflict Minerals Procurement Policy", the "Guidelines on Suppliers' Conduct", the "Safety Management Requirements for Related Parties", the "Integrity Management System", and other sustainable procurement-related agreements.

Through the formulation and oversight of the sustainable procurement policy, the Group aims to achieve the following objectives:

- 1) Ensure suppliers understand and adhere to the code of conduct;
- 2) Encourage suppliers to adopt best practices in areas such as environmental sustainability, occupational safety and health, human rights, labour standards, and business ethics. This assists the Group in building a sustainable supply chain and achieving other sustainability goals;
- 3) Emphasise and regulate the sustainability performance of suppliers;
- 4) Identify potential sustainability risks within the supply chain and promptly address them by developing appropriate policies.

### Management Process

Evaluation and introduction stage	Initiating the review: suppliers submit applications and provide basic information Preliminary review: review documents including licenses and certificates related to their management systems provided by suppliers and conduct review on dimensions including operating qualification, business ethics, environmental protection, occupational safety and health management, production management as well as legal and labour standards On-site assessments:
	<ul> <li>Selected suppliers that pass the preliminary review undergo assessments conducted by the assessment team on-site at the suppliers' offices and production park to verify qualifications and management system documents singly provided in the preliminary review. Suppliers with good ESG performance will be marked as prioritised or favorable in terms of the procurement volume and the Group conducts visits to their production lines and workshops. On-site audits of new suppliers are performed through a combination of qualitative and quantitative assessments. Suppliers found to have fundamental issues during the on-site audits, such as engaging in unhealthy competition, monopolistic practices, corruption, or violations of human and labour rights, will be excluded from the onboarding process. Quantitative assessments are conducted based on established evaluation items and scoring criteria covering aspects such as corporate qualifications, production and supply capacity, quality management, service quality, cost competitiveness, and ESG-related areas. Over 40% of these indicators are related to sustainability performance. New suppliers must achieve an "A" grade in the assessment to be directly included in the Qualified Supplier List. This ensures that new suppliers are not only competitive in terms of product and price but also meet the Group's requirements in ESG areas, which the Group considers equally important</li> <li>All things being equal, the Group will give preference to suppliers that are more advanced in terms of sustainability commitments and established relevant management policies, as well as those who have implemented internationally recognised sustainability-related management systems and guidelines such as ISO14001, ISO19001, and ISO45001, and suppliers who have made significant</li> </ul>
	contributions to the Group's sustainability objectives. Approved suppliers are required to sign the "Supplier Integrity Agreement" and the "Notification Letter or Integrity Management, Mutual Benefit and Win-Win" and reply letter to familiarise themselves with the "Xinyi Untrustworthy List"
Classification	In terms of supplier classification and management, the Group classifies qualified suppliers into 4 grades based on the assessment results. During the Reporting Period, a total of 3,959 suppliers were engaged in cooperation, of which around 12% is core suppliers

Performance assessment	<ul> <li>Assessment frequency: conduct monthly, quarterly, and annual evaluations of suppliers on Qualified Suppliers List</li> <li>Assessment includes: <ul> <li>Document reviews, performance evaluations, and on-site audits</li> <li>The monthly assessment focuses on factors such as products, services, quality, and</li> </ul> </li> </ul>
	<ul> <li>Interinoritity assessment rocuses on factors such as products, services, quality, and supply capacity. ESG areas, like environmental protection and occupational safety and health, contribute to a relatively smaller portion of the overall score and are primarily overseen by subsidiaries' procurement departments</li> <li>The quarterly and annual evaluations place significant emphasis on performance in ESG areas, with the Group's central procurement department being responsible for the annual evaluation</li> <li>According to the assessment results, the Group will propose corrective actions to those suppliers who have failed to meet targets in the monthly assessment for a number of times, or those who have failed to meet targets in the quarterly/annual</li> </ul>
Elimination and exit	<ul> <li>evaluations</li> <li>Failure to meet the standards after rectification will result in the cancellation of the supplier's qualification and the termination of the business relationship</li> <li>Throughout the Reporting Period, suppliers who provided products and/or services to the Group were those who adhered to the established supplier development and management practices and met the standards set in regular assessments</li> <li>If a supplier violates the "Supplier Integrity Agreement" and/or a breach of trust in business cooperation, it will be included in the Group's untrustworthy list. The Group will immediately stop the business cooperation and prohibit it from participating in the Group's tendering, procurement and business cooperation within a set period of time</li> <li>After the set period of time, such supplier can be included once again in the cooperation list after re-evaluation. If such partners were included in the untrustworthy list for the</li> </ul>

To establish a sustainable supply chain, the Group selects suppliers who share the values of integrity, fairness, honesty, and compliance with sustainable development principles. Through steadfast commitment, deliberate choices, and industry influence, the Group actively promotes the sustainable development of the entire supply chain.

### Suppliers' Code of Conduct

A Supplier Code of Conduct has been formulated by the Group, which encompasses 14 points that suppliers must fully comply with. The code references the United Nations Global Compact's ten standards for assessing supply chain sustainability in the areas of human rights, labour standards, environment, and anti-corruption. All suppliers are required to sign and affix their corporate seals as explicit acknowledgment and commitment to comply with the Group's established "Supplier Code of Conduct".

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Core Elements of Xinyi Solar's Supplier Code of Conduct		
Defending human rights	<ol> <li>Adopt a zero-tolerance policy for bonded labour, illegal trade, slavery or child labour, and require the proof of voluntary employment</li> <li>Treat employees with dignity and respect, and prohibit corporal punishment, threats of violence or other forms of harassment or abuse</li> <li>Guarantee the freedom of association of employees</li> <li>Ensure that the products or materials to the Group do not contain any materials manufactured or procured from the Democratic Republic of Congo or other neighbouring countries, and signing of the "Conflict Minerals Procurement Policy" is required to commit to the Group's sustainable procurement policy</li> </ol>	
Environmental protection	5) Comply with local environmental laws and regulations, and provide proof of compliance with local regulations or best practices (such as ISO14001 certification or local equivalent certification), and sign the "Green Environmental Protection Agreement" to commit to the sustainable procurement policy of the Group	
Compliance with laws and regulations	6) Strictly comply with laws and regulations including but not limited to labour, occupational safety and health, intellectual property, anti-corruption and environmental protection	

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Core Elements of Xinyi Sol	lar's Supplier Code Conduct
Labour standards	<ul> <li>7) Take necessary measures to ensure that the age of employees meets the requirements of the laws and regulations of the place where the business located</li> <li>8) Ensure reasonable working hours in accordance with laws and regulations, and protect employees' right to rest and vacation</li> <li>9) Adhere to the principles of fairness, justice and equality, eliminate discrimination in the workplace, ensure that the employment process, contract terms, compensation, benefits, promotion, contract termination or retirement are fully respected and non-discriminatory employment measures are taken</li> <li>10) On the basis of statutory wages and benefits, encourage suppliers to provide employees with remuneration packages that exceed local industry standards</li> <li>11) A standardised occupational safety and health management system has been established to provide employees with sufficient labor protection supplies and effective safety supervision measures to prevent work-related injuries and deaths and ensure a safe and hygienic working environment. Suppliers who provide meal and housing benefits should ensure the safety and hygiene of meals and accommodations. Suppliers shall sign the "Related Party Safety Production and Environmental Protection Agreement" to undertake to comply with the "Related Party Safety Management Regulations" of the Group</li> </ul>
Business ethics	<ul> <li>12) Suppliers are prohibited from offering, supporting, soliciting or receiving (directly or indirectly) any form of bribery as an inducement or reward for any business transaction with the Group. All suppliers are required to sign a "Supplier Integrity Agreement" with the Group</li> <li>13) Respect and protect the intellectual property rights of the Group and shall not engage in activities that infringe the intellectual property rights of the Group</li> <li>14) Avoid conflicts of interest</li> </ul>

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The Group considers the "Code of Conduct for Suppliers" as the fundamental standard that all suppliers must meet. We expect suppliers who provide products/services to the Group to embrace and implement this requirement throughout their supply chain. The Group has imposed more stringent requirements on suppliers in key areas such as human and labour rights protection, integrity, occupational safety and health, and environmental management. Suppliers are requested to sign additional agreements to ensure their own achievement of these higher standards. Moreover, the Group seeks to encourage more suppliers to adopt higher standards in critical areas of their own operations and the discipline of their supply chains by prioritising purchases and/or increasing the volume of purchases.

Suppliers should be determined to eliminate forced and child labour within their own scope of operations. They are also expected to regularly assess and take effective measures to mitigate human rights risks in their supply chains. Any use of physical punishment, threats of violence, or any form of physical, sexual, psychological, or verbal abuse as a means of discipline or control in the workplace must be strictly avoided. Suppliers should establish robust management systems and take necessary measures to safeguard the legitimate labour rights of their employees. This includes ensuring non-discrimination throughout the employment process, providing lawful and compliant remuneration and benefits, ensuring timely payment, promoting reasonable working hours and leave entitlements, and prioritising occupational health and safety protection. The Group enforces regulations and guidelines such as the "Conflict Minerals Procurement Policy", the "Safety Management Regulations for Related Parties", and the "Safety Production and Environmental Protection Agreement for Related Parties" to regulate and restrict the behaviour of its suppliers. We strive for the full respect and protection of human rights, dignity, and labour rights for all individuals employed within the supply chain.

The Group has always adhered to the business principle of "Trust first" as the standard for business dealings with all suppliers. Integrity management is the bottom line that the Group cannot compromise when carrying out business cooperation, therefore, the Group issued the "Notification Letter on Integrity Management, Mutual Benefit and Win-win" and required all suppliers to sign and seal to ensure that they are aware of the 14 violations of good faith in business co-operation that the Group is committed to avoiding. In addition, the Group requires all suppliers to sign integrity agreements, pledging to strictly abide by laws and regulations in business transactions, prohibit any form of bribery, and actively monitor and report violations of laws and disciplines in the cooperation between the two parties to protect fair, just and open transactions and the interests of both parties. The integrity agreement clearly sets out the joint and independent responsibilities of both parties, and stipulates the liability for breach of contract, so as to better strengthen the suppliers' integrity awareness and ensure that they abide by business ethics in business cooperation.

The Group calls on suppliers to develop policies aimed at ensuring the sustainable development of their businesses to proactively manage the environmental impacts of their production and operations, and shall proactively minimise negative impacts and enhance positive impacts, which should cover climate, energy, water resources, waste and other sustainable development management issues related to their businesses. The Group has entered into "Green Purchasing Agreements" with its major suppliers of raw and auxiliary materials to ensure (1) the environmental legality of the products provided to the Group (including compliance with RoHS and REACH); (2) the production management can meet the Group's needs for continuous improvement of the environment, and it is necessary to cooperate with the Group's environmental management related operational requirements and accept written or on-site environmental review activities proposed by the Group; and (3) take the initiative to assume environmental responsibility, not only limited to its own production and operation and products strictly abide by green environmental protection laws and regulations and the Group's environmental management requirements, but also need to strengthen the control of its supply chain and actively promote the green development of its supply chain. Qualified suppliers who have signed and committed to abide by the "Green Procurement Agreement" are the Group's green partners and enjoy the right of priority in procurement among suppliers with equal conditions.

In accordance with the results of the regular assessment for the Reporting Period, the Group ensured that suppliers have fulfilled the environmental and safety commitments in the "Code of Conduct for Suppliers" and contract terms, and strictly complied with the agreements and system requirements in human and labour rights protection, integrity and honesty, occupational safety and health, and environmental management. At the same time, the Group also encourages its suppliers to share the Group's sustainability philosophy with their supply chains, to adopt the same principles in supply chain management and to adopt the same standards in regulating the behavior of their suppliers.

# XSG 9: Conduct procurement in a responsible and sustainable manner and regulate supplier behaviour through quality, environmental protection and safety protocols Target type Qualitative Progress Purchased from a total of 3,959 suppliers, 100% of which were qualified suppliers that comply with the Group's supplier development and management practices and met the standards in periodic assessment XSG 9

### Global Presence and Enhancing Resilience of Supply Chain

Enhancing supply chain resilience requires not only focusing on and effectively managing the reputational and market risks that may arise from environmental, social and human rights performance of the supply chain, but also the changes in regional supply capacity and prices of raw materials and energy due to the international environment, local policies and environmental constraints, as well as the impacts of climate change on the stability and sustainability of the supply chain, and logistics and transportation. Therefore, the Group endeavours to establish and enhance its supply capacity in different regions around the world and continuously improve its channel distribution in order to reduce the fluctuation of supply capacity and cost in a single region as well as the impact of climate or other external factors on the supply of raw materials and logistics and transportation. Natural gas, soda ash and silica sand are the three major costs in the production of solar glass. The Group adopts a direct supply mode for natural gas and has established stable natural gas supply channels in each of its production bases. For the procurement of core raw materials, such as soda ash and silica sand, the Group has established supply channels in various regions around the world so as to enhance the stability and cost-effectiveness of supply. The Group's domestic and overseas procurement of raw materials for production is managed through an ERP system. The ERP system can give full play to the Group's channel and scale advantages, ensure that resources are obtained at the most reasonable price through comprehensive price comparison and centralised procurement, and establish and gradually improve the Group's global supply chain by combining internal resources to reduce procurement risks caused by regional policy changes. At the same time, it can also enable the Group to manage raw material inventory more efficiently and keep track of inventory status of each production base in a timely manner to ensure that inventory is maintained at an appropriate level.

During the Reporting Period, the resilience of the Group's supply chain was further strengthened, primarily benefiting from the enhancement of the controllable supply resources and processing capacity of core raw materials, as well as the further improvement of the global sourcing channels. Despite the frequent occurrence of climate change and extreme weather events in recent years, there was no disruption occurred in the supply chain due to climate during the Reporting Period. The impact of climate change on the supply chain in the short to medium term is still within control. In the future, the Group will continue to further enhance the stability of raw material supply, the controllability of logistics and transportation and the cost-effectiveness through various means, such as resource reserves, long-term strategic cooperation, upgrading of processing capacity and logistics and transportation capacity, in order to establish and gradually improve the resilience of the supply chain in response to climate change. The Group maintained a 100% performance rate for economic contracts during the Reporting Period.

### SUSTAINABLE CUSTOMER RELATIONSHIPS

Xinyi Solar is a global leader in the solar glass industry, providing a wide range of solar glass products to global PV module manufacturers to meet their needs for continuous cost reduction and efficiency improvement as well as environmental benefits. Through its sales and after-sales service teams and annual customer satisfaction surveys, the Group understands and follows up in a timely manner on customer feedback and suggestions regarding the quality of the Group's solar glass products and after-sales services. According to the annual customer satisfaction survey for 2024, customers highly recognised the quality of the Group's solar glass products and were satisfied with the after-sales services.

### **Excellent Quality**

Solar glass is mainly used as the cover and back sheet of PV modules. It plays a key role in protecting the cells in PV modules. Therefore, the quality of solar glass has a significant impact on maximising the service life of the battery and minimising the degradation rate of PV modules over 25 years under the IEC and TÜV standards, customers are particularly concerned about the quality of solar glass products and have set stringent standards on performance parameters. The Group attaches great importance to product quality and reputation and strictly complies with relevant laws and regulations in the places where it operates. It has established the quality control system including "Quality Control Manual" in accordance with the ISO9001:2015 quality management system standards, implemented quality management measures, launched quality training and formed a set of rigorous and comprehensive internal quality management system. There were 124 quality management system documents revised and added in 2024, with main amendments to the relevant quality control standards, incoming material acceptance standards and relevant operation regulations. Also, there were additional new operation regulations on the training of inspectors of various work processes on the essentials of quality knowledge and the incoming material acceptance standards for the auxiliary materials for the production of the Group. As of the end of the Reporting Period, each of the Group's production bases put into operation passed the ISO9001:2015 quality management system.

In addition, the Company regularly conducts comprehensive audits in accordance with the provisions of the quality management standards through internal quality system audits every year, and follows up on non-conformities to rectify them. On-site inspections, process self-inspections, and quality-specific inspections have been carried out in 2024, thereby promoting internal quality improvement work.

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Quality Control Process of Xinyi Solar		
Source control	<ul> <li>Control the place of origin and quality; carefully select raw materials</li> <li>Sample inspection of feeding materials before production</li> </ul>	
Production process	<ul> <li>The QC specialists monitor and control the production process and critical procedures to ensure compliance with the requirements and standards of the Group</li> <li>Real-time monitoring by automated system so that abnormal conditions can be detected in a timely manner and corrective measures can be taken</li> </ul>	
Inspection of finished products	<ul> <li>The QC department is responsible for monitoring and ensuring that the production department implements standardised testing procedures for finished products</li> <li>The QC laboratory is responsible for functional testing of products to ensure that all products have passed all performance tests including bubble and mechanical strength tests before delivery</li> </ul>	

In addition to the testing of finished products, the Group has also established and strictly enforced a regular re-inspection process for glass in stock to ensure that all its performance indicators meet internal control and customer standards. For non-conforming products that fail to pass the finished product/inventory/shipment test, the "Non-conforming Product Management Procedures" is implemented, and the quality control department is responsible for supervising the disposal of relevant products to ensure that they are not delivered without meeting the standards. On the basis of ensuring product quality, the Group standardises the delivery process in accordance with the requirements of the internal system, strictly abides by the delivery deadline, and ensures on-time delivery through smooth communication among sales, production, storage and transportation departments to protect the interests of customers. The Group has set up an annual quality training plan and carried out quality training work, such as job responsibilities training for quality inspectors, inspection standards training, customer standards training, basic knowledge training on quality management system, etc., to improve the professional skills of on-site quality inspectors. In addition, the Group has established a quality performance evaluation mechanism, supervised various quality control measures of production lines in accordance with the system terms, conducted regular supervision and inspection, and strictly implemented relevant evaluations in accordance with the evaluation mechanism to further enhance the quality awareness of all employees.

The Group has set up Customer Service Centre and formulated process systems such as "Domestic Sales and Service Management Procedures", "Export Sales and Service Management Procedures", "Quality Complaint Management Procedures" and "Solar Customer Complaint Assessment Rules". In accordance with the standard process requirements, we provide good customer service and communication and respond to customers' requests in the first instance. After the product is delivered, after-sales service personnel will follow up with customers in a timely manner to understand their feedback on the products and services. In order to further improve customer satisfaction, increase customer loyalty and establish and maintain long-term cooperative relationships, the Group focuses on strengthening after-sales services. After the product and service. In order to further improve customer in time to understand their feedback on the product and service personnel will follow up with the customer in time to understand their feedback on the product relationships, the Group focuses on strengthening after-sales services. After the product and service. In order to further improve customer is to understand their feedback on the product and service. In order to further improve customer satisfaction, increase customer loyalty, and establish and maintain long-term cooperative relationships, the Group focuses on strengthening after-sales service.

After learning the customers' feedback on product quality problems, the after-sales service staff will respond within the specified time in accordance with the internal system requirements and take timely measures to remedy the negative impact on customers. If it involves the appeal of returning the product, the after-sales service staff and quality engineers need to communicate with the customer in accordance with the return operation procedure within the specified time limit, and after jointly analysing the urgency of the customer feedback, make corresponding arrangements as soon as possible according to the negotiation results, and should provide an analysis and improvement report according to customer needs after the incident is resolved, and provide feedback to the production department and the supervisory leaders. The Group's responsive and proactive attitude, aftersales service and handling procedures have been consistently highly recognised by customers, and customers are satisfied with the quality of the Group's services, especially the attitude of the after-sales service team, the speed of response, the ability to solve problems and the accuracy of solutions.

As the global push for carbon neutrality advances, various countries and regions, including the European Union, the United States, Korea, and China, have implemented measures such as carbon pricing and trading mechanisms, carbon tariff policies, and carbon footprint management policies. With over 50% of PV module demand expected to come from overseas markets, end-users are increasingly demanding lower carbon footprints for PV modules. Consequently, PV module manufacturers are not only adopting green production practices within their own processes but also setting higher environmental standards for their upstream raw materials and auxiliary components, particularly regarding carbon footprint performance. During the Reporting Period, to better meet the requirements for product carbon footprint certification and supporting the development of low-carbon photovoltaic modules for participating in solar power project bids in markets like France and Korea, the Group has completed a carbon footprint assessment from the production stage up to the point of sale for its mainstream solar glass products in all production bases in operation. The assessment obtained carbon footprint certification in accordance with the verification criteria ISO14064-3:2019 and ISO14067:2018.



During the Reporting Period, the Group primarily focused on selling deep-processed solar glass products, which obtained the China Compulsory Certification (CCC) and complied with relevant safety performance requirements. Products supplied to overseas markets primarily originated from the production base in Malaysia, meeting international certification standards such as RoHS and REACH. During the Reporting Period, the Group did not encounter any safety or health-related product recalls for sold or shipped items.

### **Responsibility Marketing Management**

The Company treasures its brand image. All marketing materials are reviewed by relevant internal departments before release and approved by key authorised managers to ensure that all marketing activities comply with the laws and regulations, social norms and business ethics requirements of the countries and regions where the business is conducted. The Company provides training for marketing staff to ensure that they can provide customers with clear and accurate product information when promoting products. During the product promotion process, the Company did not make any exaggerated introductions or promotion. During the Reporting Period, the Company did not have any marketing violations.

The Group manages confidential information such as intellectual property rights and customer information in strict accordance with the requirements of the "Confidentiality System". The sales contract contains confidentiality clauses to protect customer information and privacy, and the Group also has internal systems to regulate the legal use and effective management of customer information by the sales department to ensure customer information security and prevent information leakage. Important customer files and information are classified as Class I confidential files and are properly managed by the Group's archive. During the Reporting Period, no customer information leakage was reported for the Group.

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

Sustainable customer relationships need not only meeting customers' requirements for product quality, safety performance, environmental benefits and carbon footprint, but also keeping pace with customers in product development and supply capabilities. The Group has formulated a technology research and development management system and improved its organisational structure and R&D project development process to ensure the efficient implementation of its R&D activities.

The Group has established an enterprise technology centre in Anhui Province and led a number of major research and development projects and has won one Second Class Award National Science and Technology Progress, one Second Class Award for Provincial Science and Technology Progress, two Third Class Awards for Provincial Science and Technology Progress and one First Class Award for Municipal Science and Technology Progress. In addition, the company participated in the formulation of 10 national standards, 3 industry standards and 6 group standards.

As a leading private solar farm developer and operator in the PRC. The Group has been involved in the development and construction of solar farm projects since 2012, and has therefore maintained a keen market sense over the long term. The unique business model enables the Group to develop and deploy new product in the market at an early stage, to optimise and transform production equipment in an orderly manner to match the demand for new products, and to continuously satisfy customers demand for product innovations, thereby forming closer strategic cooperative relationships with customers. During the Reporting Period, the Group maintained its competitive advantage in the thin glass and large-format glass markets, and continued to improve in areas of light transmittance, strength, weather resistance and abrasion resistance, and its new products were well recognised by customers. The Group's R&D investment in 2024 amounted to RMB636 million, mainly for the research and development of solar glass production technology, equipment and products.

### Intellectual Property Management System

In order to promote scientific and technological innovation and form independent intellectual property rights, encourage employees to carry out invention and creation activities, protect invention and creation patents, and improve market competitiveness, Xinyi Solar has formulated the "Intellectual Property Management Measures" and other systems in accordance with the "Patent Law of the People's Republic of China" and other laws and regulations.

The Technology R&D Centre of the Group is responsible for patent management. A dedicated team has been set up at the group level, and dedicated personnel have been assigned to each subsidiary to be responsible for patent application, management and protection. When encountering infringement incidents, we resolutely take legal measures to safeguard the rights and interests of the Group and its employees and strengthen the protection of intellectual property rights through third-party professionals such as external experts, patent agents and lawyers. The Company strictly protects its own independent intellectual property rights from infringement, while effectively managing the intellectual property risks of its supply chain partners and respecting and protecting their intellectual property rights. As of the end of the Reporting Period, the Group had obtained a total of 291 registered patents. During the Reporting Period, 85 patent applications were completed and 78 were authorised. There are no pending patent litigations.

The Company pays attention to the dissemination of patent and intellectual property knowledge and conducts thematic training for employees in key patent and intellectual property related departments such as production and technology from time to time. During the Reporting Period, the Company organised a total of 5 intellectual property-related training sessions, covering basic patent knowledge, application procedures, patent mining, writing skills and other content, which greatly improved the practical ability and risk prevention awareness of relevant employees.

While standardising the management of the entire intellectual property process, it also clarifies the incentive mechanisms for various patent applications, patent awards, special projects, and patent licenses. In order to motivate employees to strive for innovation, the Group can combine daily work inventions/propose patents that can be fully applied to the production of solar glass and the development, construction and operation of solar farms, and can effectively improve production efficiency, economic and/or environmental performance. According to the "Measures for the Administration of Intellectual Property", the Group will reward the invention employees/teams according to the patent types and stages for each patent that has been accepted, disclosed and granted. During the Reporting Year, the Group disbursed patent incentives of approximately RMB98,000.

### **INFORMATION SECURITY MANAGEMENT**

### Information Security Management System

The World Economic Forum has identified the cybersecurity question as one of the top ten global risks in the next two years. The Group's materiality assessment also indicates a significant increase in stakeholder concern regarding information security. With the promotion of green and low-carbon operations, the application of internal office OA system, enterprise resource planning (ERP) system and business intelligence (BI) system as well as the wider support for the information management of the Group's different business divisions and operational processes, the issue of information security has been fully recognised and highly regarded by the Group as a whole.
The Group strictly abides by the Cybersecurity Law of the People's Republic of China, the Data Security Law of the People's Republic of China, the Personal Information Protection Law of the People's Republic of China and other laws and regulations and relevant provisions, and with reference to ISO/IEC 27001:2013 Information Security Management System and ISO/IEC20000-1:2018 Information Technology Service Management System, has formulated a series of policies and rules and regulations to ensure information security, including but not limited to the "Information Security Management System", the "Information Technology Service Management System" and the "Information Security Reward and Punishment Management Regulations", which standardise the information security management framework from the management and technical perspectives and lay a solid foundation for information Security. During the Reporting Period, the Group revised the "Information security management System" and issued Information Specialised Management System for all software, hardware and the Group's information assets, including intangible assets such as information, services, personnel and patents, which are held and managed by the Information Technology Centre. The Group also requires that employees and external partners related to the information assets regulate their own behavior in strict compliance with the established management system and principles of the Group in order to avoid information security breaches and leakage incidents. In respect of information security management, the Group has set quantifiable objectives, and the progress is regularly reviewed and evaluated by the Information Technology Centre.

The Information Technology Centre has established an information security management organisation. The highest information security organisation is the Information Security Management Committee, which is responsible for guiding, promoting, supervising and serving the information security work of the Group. The Information Management Committee has an Information Security Management Office ("**Information Security Office**") under it, which is responsible for information security management in accordance with the principle of "who is in charge, who is responsible". The Information Security Office has an Information Security Execution Working Group, which carries out various information security tasks based on the actual situation of the Information Technology Centre.

### Information Security Audit

Xinyi Solar mobilises internal and external forces to double guarantee information security.

Internal	External		
Establish an internal audit mechanism for the information	Every year, an independent third-party professional assessment		
security management system and conduct routine internal	agency is entrusted to conduct security assessments on		
audits and management reviews at least once a year.	the Group's information systems, provide reinforcement		
	suggestions, and issue a network security risk assessment		
	report to provide a basis for the Group to optimise its		
	information systems and strengthen security management		
	and network security construction.		

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During the Reporting Period, the Information Technology Centre continued to promote the construction of the security management system and conducted 8 internal audits and 2 external audits. External audits strictly follow international standards and are performed by professional organisations to ensure the professionalism and authority of the audit work. At the same time, the Information Technology Centre successfully completed the security assessment of 6 critical systems, and the remaining systems have been registered, which has comprehensively improved the security and compliance level of the information system and provided a solid guarantee for the stable operation of the business. There were no major failures in the information systems of the Group, nor were there any major/significant information security incidents such as leakage of commercial secrets or sensitive information.



### Information Security Culture Construction

The Group attaches great importance to the establishment of information security culture. By establishing information security communication, education, rewards and punishment mechanisms covering all employees, the Group integrates the information security culture of "All employees participate, and everyone is responsible" into the corporate culture, enhances the information security awareness of all employees, and continuously improves the overall competitiveness of corporate management.

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Training mechanism	In order to strengthen the information security awareness of all staff and to prevent information security incidents caused by staff neglecting information security regulations and procedures, the Group has strictly implemented the "Information Security Reward and Punishment Management Regulations" as well as provided network and information security related training to all staff, which covered the laws and regulations on security information, cultivation of information security awareness, information security management system of the Group, security regulations and codes of practice for the workplace, and cases of information security incidents.		
Reward and punishment mechanism	<ul> <li>Employees are encouraged to value and protect the Company's information assets and act in strict accordance with the established management system;</li> <li>Departments or individuals who have complied with the information security management system and information security service procedures for a long period of time, protected the Group's information assets, effectively prevented the loss, misuse and theft of information assets, and excelled in the management of information security will be awarded with annual merits and extra points in performance appraisal;</li> <li>Employees who have discovered and reported information security incidents that are seriously detrimental to the interests of the Group or have taken effective measures to prevent the impacts of the incidents from spreading will be awarded with cash incentives;</li> <li>While for employees who violate the information security management system, cause information of the Company, including but not limited to suppliers' and customers' information, employees' personal information, intellectual property information, etc., as well as those who intentionally damage or delete data of the information system to evade the information security supervision, they will be punished by warnings to termination of the labor contract, depending on the severity and impact of the information security incidents. If the incident involves violation of national laws and regulations, we will strictly investigate the legal responsibility according to the law. All rewards and punishments are handled in accordance with the principles of compliance with laws and regulations, timeliness, openness and fairness.</li> </ul>		
Emergency drills	We conduct a cybersecurity drill once a year for important systems, with the core scenario being system anomalies caused by cybersecurity attacks. We simulate the entire process of handling cybersecurity emergencies and comprehensively improve the comprehensive emergency response capabilities of information security employees.		

During the Reporting Period, the Information Technology Centre established a vulnerability warning and repair mechanism, issued vulnerability warning reports irregularly every month, and discovered potential security vulnerabilities through manual penetration testing and vulnerability scanning. It classified the vulnerabilities according to their severity and scope of impact, formulated targeted repair plans, and tracked and verified the repair effects to ensure that the vulnerabilities were dealt with in a timely and effective manner, thereby comprehensively improving the security protection capabilities of the information system, reducing security risks, and ensuring the stable operation of the business system.

### SOCIAL WELFARE AND COMMUNITY ENGAGEMENT

The Group's unwavering vision is "Treating the world well". As a company, we acquire resources from society to advance and prosper. Consequently, we have a proactive duty to undertake corporate social responsibility and facilitate the sustainable development of society. This entails not only actively organising or participating in volunteer activities, community services, and supporting public welfare and charitable initiatives, but also leveraging our business strengths and advantages. We strive to promote the creation of a society characterised by climate resilience, compassion, mutual support, fairness, justice, and environmental friendliness.

# XSG 12: Promote the mutual prosperity and development of the community and actively contributes to the economy, environment and public welfare Target type Qualitative Progress • Generated direct economic value of RMB21.96 billion • Contributed economic value of RMB21.38 billion to community and upstream value chain, including charitable donations of RMB6.262 million XSG 12

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XSG 14: Promote the optimisation and upgrading of solar glass production technology and products through continuous research and development investment, so as to help PV power generation to achieve cost reduction and efficiency improvement, and promote local sustainable industrial development through the launch of more efficient and environmentally friendly solar glass production lines to increase the contribution of green industries to local taxation

Target type	Qualitative
Progress	During the Reporting Period, four new solar glass production lines were added, R&D expenses
	exceeded RMB600 million, and the tax contribution of solar glass business was RMB78.55
	million
XSG 14	

As a leading global manufacturer of solar glass and a prominent private solar farm operator in China and a pioneer and explorer in the field of green new energy, Xinyi Solar actively responds to the national strategic goals of "Carbon peak and carbon neutrality" and is committed to promoting energy structure transformation and sustainable development. In 2024, Xinyi Solar joined hands with Liulang Town, Wanzhi District, relying on Xinyi Group's leading position and rich experience in the new energy industry chain, and use photovoltaic power generation as the entire source of electricity to create a zero-carbon demonstration project that integrates new energy science popularization, education and learning, and beautiful rural construction. After its full completion, it will become the first clean energy theme exhibition hall in Anhui Province. The science popularisation centre covers a clean energy exhibition area, an intelligent centralised control big data platform, a new energy exploration corridor, a photovoltaic landscape corridor and an operation and maintenance training centre. The big data intelligent inspection, AI intelligent analysis and cutting-edge intelligent systems. Combined with real-life experience, users can intuitively feel the charm of the modern development of photovoltaic new energy and deeply understand the importance of its high-quality development under the national energy transformation strategy. We will continue to optimise the content of the exhibition hall, innovate popular science formats, and strive to build the science popularisation centre into an important window for primary and secondary school students and even people from all walks of life to understand clean energy.



The core products of the Group, solar glass, and photovoltaic power, play a pivotal and positive role in achieving the global energy transition, establishing a renewable energy-based power system, and mitigating climate change. During the Reporting Period, the Group also actively utilised our business expertise to operate distributed photovoltaic power generation projects for the light rail system in Wuhu, the city where our production headquarters are located. By effectively utilising the available roof space at stations and car parks along the rail line, we provide approximately 7.46 million kWh of green electricity to the stations annually, reducing the demand for purchased thermal power by approximately 11%.

The Group highly focuses on the needs of low-income groups, children, disaster-affected communities, and the development of villages where solar farms are located. It also actively initiates or participates in local poverty alleviation activities. During the Reporting Period, the Malaysia production base made donations to the Ministry of Finance of the State of Melaka for the government's poverty alleviation and relief initiatives, contributing over RMB2.3 million. Furthermore, the Group's various production bases and power stations provided support for poverty alleviation efforts, and assistance to the underprivileged in the regions where the Group operates through donations and material contributions during the Reporting Period.



While actively promoting community development and rural advancement through charitable donations, the Group also takes proactive measures to engage its employees in volunteer activities within the communities where it operates, encouraging them to participate alongside their families. Since the establishment of the Xinyi Volunteer Team in 2021, the Hong Kong subsidiary has consistently organised its staff to participate in volunteer service activities organised by local charitable organisations on an annual basis. The senior management team leads by example, actively joining these initiatives to embody the Xinyi's philosophy of "Treating the world well," wholeheartedly caring for the underprivileged and supporting them through their own efforts. During the Reporting Period, the subsidiary continued its involvement in various initiatives, including the distribution of festive food bags and holiday blessings to elderly during the Chinese New Year, Dragon Boat Festival, and Mid-Autumn Festival through the Lok Sin Tong Benevolent Society of Kowloon. Additionally, they participated in flag-selling and the Community Chest Casual Day activities organised by renowned local charities such as the Tung Wah Group of Hospitals and Yan Chai Hospital. The Group also took an active part in the Charity Run organised by Lok Sin Tong Benevolent Society of Kowloon, and the Moca-5 Cognitive Screening and Assessment Activity for the elderly in Choi Fook Estate, Kowloon Bay with Bliss District Elderly Community Centre of Hong Kong Christian Service.



### **Issues of focus**

- Employment compliance
- Employee occupational health and safety
- Employee benefits and talent motivation
- Employee engagement, diversity and inclusion



### **EMPLOYMENT COMPLIANCE**

Xinyi Solar strictly abides by "the Labour Law of the People's Republic of China", "the Law of the People's Republic of China on Labour Contracts", "the Law of the People's Republic of China on Employment Promotion" and other laws and regulations, as well as the laws and regulations of the place where it operates. It actively responds to the international initiative and standard requirements of the Ten Principles of the Global Compact, the "Universal Declaration of Human Rights" and the "International Labour Organisation Declaration on Fundamental Principles and Rights at Work" on human rights and labor standards. With valuing and respecting the basic human rights and labour rights of all employees, Xinyi Solar implements the "People-oriented concept" into every aspect of talent management through the establishment and improvement of the talent management system.

### Talent Management System

The Group's talent management system is established based on the requirements of local regulations/laws and regulatory authorities where it operates, and benchmarks industry, local and international best practices as reference. The Group's internal management system was set up according to the four core modules of "Employment and Assessment", "Compensation and Benefits", "Training and Promotion" and "Occupational Safety and Health", which are implemented by the relevant departments and monitored by the Board, the management committee ("Management Committee") or dedicated committees/ organisations (such as the Safety Committee ("Safety Committee") and the Internal Control Centre). The communication and feedback mechanism is established and improved to protect employees' human rights and labour interests. If there is any suspected violation of regulations or violation of employees' human rights and labour interests, the Group will immediately initiate investigation procedures and follow-up.



### **Employment Relationship**

The human rights policies and management of PV companies have attracted great attention from major stakeholders including regulators, customers, shareholders/potential investors, etc. The Group has always strictly abided by the laws, regulations and industry norms related to labour and human rights in the places where it operates, and ensures that the Group's employment systems, behaviors and measures comply with the human rights and labour-related principles of the United Nations Global Compact.

The Group protects the interests of both employees and the Group itself through equal and friendly communication, negotiation and determination of employment terms, including job and occupational requirements, basic working hours, compensation and benefits, training and promotion mechanisms, occupational safety protection, non-competition agreements, confidentiality and termination clauses. After both parties have clarified their rights and obligations and agreed to the terms of employment in writing, the employment relationship is established by signing a written employment contract. During the Reporting Period, the Group standardised the management of employment contracts and maintained a 100% signing rate of employment contracts.

Human rights are inviolable. We identify and avoid the risks of child labour and forced labour through due diligence in the employment process and have established and continuously improved a sound feedback communication mechanism to timely understand, effectively intervene and properly handle the risks, so as to ensure the appropriate protection for labour rights.



We promise not to allow child labour, forced or involuntary labour within the Group

### Our actions

- Never employ anyone below the legal minimum age of labour in the place of business
- The terms and conditions of employment are set out in writing and are made known to employees, and the employment relationship is determined by a written employment contract
- Strict inspection and supervision of the recruitment and entry process, including verification of original identity documents such as ID cards and other required documents to avoid child labour and forced labour
- Respect and protect employees' right to terminate their employment contracts, and ensure that employees are entitled to the benefits of termination in accordance with the terms of employment, including but not limited to wages and share options
- Establish a system of reasonable working hours. Strictly comply with the statutory regulations on working hours in the place of business. If working hours need to be extended, ensure that the wishes of employees are respected and the requirements of laws and regulations in the place of business are met and provide overtime allowances



 Strictly follow the established internal systems and regulations of Xinyi Solar's talent management system in handing employment, assessment, remuneration, benefits, training, promotion and other related matters, and ensure compliance with relevant local laws and regulations to eliminate inequality treatment of employees in any employment matters based on race, ethnicity, nationality, age gender, religious beliefs, marital status and other factors

During the Reporting Period, the Company was not aware of incidents regarding the misuse of child labour, forced labour, stigmatisation, harassment and security violence of any form. Over the past three years, the Company has not experienced any layoffs that have had a material impact on its employees or any significant mergers or acquisitions with a material impact on the majority of its employees.



### **EQUALITY, DIVERSITY AND INCLUSION**

Xinyi Solar believes that a diversified talent team help us stand out from the global competition. The Group also intends to accelerate its overseas presence and enhance overseas production capacity to better cope with the uncertainty of trade disputes. In the face of talent management challenges brought about by the expansion of business scale and overseas expansion, the Group deeply recognises the importance of diversity and adheres to the principles of "equality, diversity and inclusion" in every aspect of talent team building and talent management, and is committed to taking all effective measures to build a harmonious, mutual assistance and inclusive working environment, forming a team culture of mutual respect, equality and inclusion, so that all employees feel respected and treated with dignity, and prevent and strive to eliminate all forms of unequal treatment at work.

"Equality" is the Group's primary principle in talent management, which is reflected in all aspects of talent management:

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Employment	<ul> <li>It is specified in the "Recruitment Policy", "Campus Recruitment Procedure" and "Internal Recruitment Management Procedure" that employment should only take into account the personal ability, quality and the necessary knowledge, skills and experience requirements of the position, and eliminate the impact of other irrelevant factors on recruitment results with adherence to the principle of equal employment to firmly uphold the right of everyone to equal employment opportunities.</li> <li>Through the implementation of a strict personnel recruitment system and enhanced supervision of the employment process, the Group has eliminated all kinds of discriminatory measures and behaviors concerning employment, including but not limited to differential treatment due to non-personal ability factors such as race, ethnicity, nationality, age, gender, religious belief, marital status, etc. of applicants, discriminatory conditions contained in recruitment information, and discriminatory conditions as selection criteria in actual recruitment.</li> </ul>
Remuneration and benefits	<ul> <li>Adhere to the principle of "Equal pay for equal work" and refuse gender, geographical and age discrimination in the workplace.</li> <li>The determination and adjustment of remuneration and benefits should be solely based on factors such as position, responsibilities, work performance and seniority as set out in the Group's remuneration and benefits policies.</li> </ul>
Training	<ul> <li>Ensure all employees have equal training opportunities.</li> <li>Job skills training is arranged according to the needs of job positions and functions, and integrated skills training ensures that all employees are qualified to participate.</li> </ul>
Promotion	<ul> <li>Ensure all employees have equal promotion opportunities.</li> <li>Establish and implement a fair and impartial internal assessment and promotion system with objective and unified standards.</li> </ul>

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### Local Employment

The Group's first overseas production base was put into operation in 2016, and after eight years of development, the proportion of localised talents has increased significantly with over 85% local employees. Based on the talent management experience of the Malaysia production base, talent localisation can help the Group understand and integrate into the local society in which it operates, and is the key to building a closer relationship with the local government and local residents and gaining recognition. At the Group level, a staff team with different nationalities, ethnicities, ages, genders, professional knowledge, skills, cultural and educational backgrounds, experiences and qualifications can give the Group a broader perspective to better grasp the market needs and development opportunities of different cultural backgrounds. At the same time, building and managing a diversified team is also conducive to the formation of an inclusive culture and the gradual enhancement of inclusiveness in the Group. We learn to listen to the demands of different employees, create a diverse and inclusive working environment from the details, and pay attention to the establishment and improvement of a fair and equitable talent management system, which makes our talent team more competitive and flexible.

The differentiation comes from the different employee structure and cultural background of each production base. The Group respects and accepts differences, so it has set up local labour unions at each production base to allow different production bases to make differentiated arrangements in terms of employee management, training and development and employee activities that are more in line with the actual situation and needs of local employees on the basis of the principle of equality in talent management of the Group. In addition, employees with different races, ethnicities, nationalities, ages, genders, religious/ beliefs and marital status have different demands for work and factory life. Under the premise of ensuring that the requirements of the Group's talent management system and the principle of equality are not violated, the Group is committed to meeting the differentiated demands of employees in terms of dietary, religious/beliefs, work arrangements and family balance by taking different measures:

<ul> <li>Respect different dietary needs</li> <li>Set up canteens that meet different dietary needs, such as halal canteens, and track canteen dishes and services through employee satisfaction surveys on a regular basis to better meet employees' dietary needs</li> </ul>	<ul> <li>Caring for employees' family needs</li> <li>Understand and support employees' needs for both work and family</li> <li>Provided that not affecting other employees to enjoy their rights, arrange for family-friendly housing for employees with family members</li> </ul>	
<ul> <li>Respect for different religions</li> <li>Understand and respect the need to maintain faith in different religions and set up prayer rooms</li> </ul>	<ul> <li>Differentiated scheduling system</li> <li>Flexibly adjust work arrangements according to the differences in local labour habits, natural climate and environment and job duties. For example, quarterly differentiated schedules are implemented for outdoor work such as solar farm project construction and inspections to reduce outdoor work during the time when the temperature and solar radiation are highest at noon</li> <li>Solar glass production bases located in high-temperature areas in summer also implement shift scheduling during high-temperature periods in summer. System to reduce working hours in higher temperature workshops during high-temperature periods</li> </ul>	

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When an employee encounters unfair treatment or feels that his/her own rights and interests are infringed upon in the course of employment, including but not limited to bullying, harassment and incidents that violate the principles of honesty and ethics, problems that have not been properly resolved, or improperly handled sanctions, he/she can file a complaint to the immediate supervisor, the relevant department head and the Chief Executive Officer through different channels such as the local office, the Affairs Supervision Team, the Group's office, the Internal Control Centre and the CEO's mailbox. The Group is committed to providing employees with a fair, efficient and equal mechanism to handle employees' complaints. Through the effective supervision of the Affairs Supervision Team, the Group can better ensure that employees' complaints are handled fairly and effectively by the local office. When it comes to issues that cannot be effectively solved by the local office or when it involves the local management, employees can appeal to the higher level of management departments and management through the Affairs Supervision Team, or directly to the Group's office, Internal Control Centre and the CEO's mailbox. Employees are required to lodge a complaint in their own name and ensure that the complaints are true and the information required for the complaints is provided. The Group strictly abides by the principle of confidentiality to the names of all parties involved in the complaints as well as the details of the complaints, so as to ensure that employees can file complaints without worry.

### Support the Female Employee Development

The long-term development of the Group is inseparable from the efforts and endeavours of all employees. Therefore, the contribution of female employees in their positions should be equally valued and recognised, and the rights and interests in the whole process of employment should also be treated and protected fairly. The Group is determined to maintain gender balance in the workplace and will not limit the development of female employees based on stereotypical career or position impressions. On the contrary, we are committed to adopting all necessary measures to support the development of female employees in our actual operations, providing equal training and promotion opportunities for female employees, and providing full tolerance and care to female employees during their special periods of time.

Due to the historical imbalance of gender ratio in the industrial manufacturing industry, especially in the front-line manufacturing process, the imbalance is more obvious. The proportion of front-line production employees in the Group is more than 89% due to the flat structure. Therefore, although the Group adheres to the principle of equality and strives to eliminate gender bias, the absolute ratio of female and male employees is still far from even. We recognise that equality is not about numerical equality, but about ensuring that every employee does not feel discriminated, harassed, or treated unfairly or unjustly on the basis of their gender at any time during their employment with the Group. Through the Group's persistent efforts, the proportion of female employees has improved during the Reporting Period compared to the past three years, accounting for 21.5% of the total number of employees. In middle and back-offices functions such as quality control, sales, finance, administration or subsidiaries that do not involve production, the gender mix is more balanced with an even higher proportion of female employees.

The Group also offers a more friendly environment for female employees through workplace care and protection and diversified activities.

Workplace care and protection	The Group cares about the physical and mental health of female employees during their pregnancy, childbirth and breastfeeding. By making rational adjustments on work, reducing work intensity, providing marriage, childbirth and breastfeeding leave, and taking measures to help female employees return to work after childbirth and others, the Group hopes to make female employees feel cared for and supported and ease their psychological stress on work-related concerns during their special periods
Diversified activities	<ul> <li>Courses are provided for female employees to relieve physical and mental stress, such as yoga and dance, and establishes fitness groups to encourage employees to actively join in order to help employees gradually establish good living and exercise habits</li> <li>The Group arranges celebration activities and gives thoughtful gifts for female employees on International Women's Day, which is a holiday for female employees</li> </ul>

Female employees are the indispensable backbone of the Group's talent team. With the advantages in observation, empathy and communication skills, job stability and psychological toughness, female employees have demonstrated outstanding work abilities in management positions and many technical positions of the Group. They have demonstrated their dedication and expertise to create long-term value for the Group.



### TALENT ATTRACTION AND RETENTION

### **Employee Remuneration System**

Based on the basic remuneration requirements of the labour laws and regulations of the place where it operates, Xinyi Solar formulated and strictly implemented the "Salary Policy", "Welfare Policy" and "Incentive Policy" to set equal standards for starting salaries and compensations regardless of gender, religion, politics and marital status, with available competitive salary packages for employees through a fair, reasonable and motivating salary management system.

The compensation of the Group's employees is mainly composed of basic salary, performance pay and reward and punishment adjustment. When determining the compensation of employees, we consider the duties and responsibilities of employees, individual performance, corporate performance, market benchmarks and economic environment, etc., and strive to achieve a balance between employee expectations and the Group's benefits. The basic salary is set in a manner that ensures legal compliance and adherence to the principle of fairness and equality. In addition, based on the responsibilities of different positions, the Group has set up quantifiable performance appraisal standards in terms of economic performance, environmental performance, and production/sales/R&D and other job objectives. Based on the results of regular assessment and the provisions in the "Incentive Policy", performance pay, rewards and penalties are determined. An effective monitoring system is in place to ensure that the appraisals and the results objective, fair and equitable so as to reward the good and punish the bad. The Group implemented a compensation assessment system for middle and senior management, and during the Reporting Period, in order to fully mobilise the work enthusiasm of administrative management personnel, the Group set up additional administrative assessment scores and provided additional incentives.

The Company continues to upgrade its "Performance Management System" and uses it as a tool to set key performance indicators for different departments and individual employees to ensure that the indicators are targeted, objective and quantifiable. The company's performance appraisal covers the entire organisation and all employees, and those with excellent appraisal results will be rewarded with incentives such as bonuses, salary adjustments, and promotions.

### Staff incentive mechanism

In order to motivate and retain key talents, the Company actively provides employees with reasonable and substantial returns, including annual bonuses, medium- and long-term incentives, special incentives, etc.

In order to attract, cultivate and retain technical talents, the Group encourages employees to participate in the establishment and implementation of energy saving, cost reduction and efficiency improvement, product innovation technology project. The benefits and performance of related projects are linked with the evaluation of professional titles. The Group also sets up an incentive mechanism according to the substantive benefits brought by the projects, attracting more employees to pay attention to the technology that creates long-term benefits for the enterprise, to continuously expand the Group's technical talent team, and further enhance the welfare of core technical talents through project benefit rewards and equity incentives, so as to attract more external technical talents. During the Reporting Period, a total of 96 technicians received technical project awards issued by the Group and the Wuhu production base, the Group's largest production base, achieved zero loss of core technical talents. More than 66% of employees in the core technical team of the Wuhu production base have served for more than 5 years, of which 33% have served for more than 10 years.

In addition, for the recruitment of professional talents in the operation, management, development and construction system, the Group also encourages internal employees to recommend new hires and implements the internal recruitment recommendation reward policy during the Reporting Period. After the expiry of the probation period and the passing of the qualification assessment of the nominee, both the nominator and the nominee will be awarded in cash in order to attract more outstanding professionals.

### **Employee Benefit System**

Xinyi Solar has formulated "Benefits Policy" which regulates the Company's benefit measures and sets standards to further enhance their sense of belonging and cohesion. The Company has a comprehensive welfare system. In addition to statutory benefits, it also provides employees with health protection benefits, living security benefits, incentive benefits, holiday and cultural construction benefits.

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Statutory benefits	Social insurance and provident fund, statutory holidays and statutory annual leave and high temperature allowance		
Health insurance benefits	Health check-up, occupational disease check-up, and critical illness insurance		
Festival and cultural welfare	Holiday benefits, team building activities, employee birthdays, and employee care		
Incentive benefits	Night shift allowance, extra paid vacation, and additional share options		
Life security benefits	Communication allowance, transportation allowance, food allowance, and housing benefits During the Reporting Period, the Group also provided a scholarship fund of RMB600,000 to the children of 150 employees through the Xinyi Education Fund		

### **Employee Care**

Xinyi Solar pays close attention to the needs of its employees, not only in terms of work, but also when it realises that employees are confused or have difficulties in living in the factory area and achieving between work-life balance, it also responses positively and takes effective measures to help the employees to answer their questions and solve their problems, so that they can fully feel the care of the Company and thus enhance their sense of belonging and cohesion. Therefore, the Group has established and continuously improved its internal communication mechanism and continuously strengthened effective communication with employees.

The Group is devoted to creating a healthy, comfortable and pleasant working and living environment for its employees. The Company continues to carry out multi-dimensional employee care activities to enrich the spare time of employees and enhance their sense of well-being in terms of physical and mental health, daily life and spiritual culture. During the Reporting Period, the subsidiary in Malaysia received the Caring Employer and Flexible Working Arrangement Award.

The physical and mental health of employees should be fully valued. Therefore, the Group actively guides employees to choose a healthy lifestyle, and at the same time, through the proactive communication of the labour union, effectively adjusts and relieves the stress of employees, and gradually establishes the concept of mental health. During the Reporting Period, the Group has developed diversified offline employee activities, including celebration activities during the traditional festival with the meaning of reunion, birthday parties, departmental outdoor team building activities, etc., to enhance communication between and within departments. In addition, the Company has organised angling club activities in response to the strong expectations of the numerous angling enthusiasts at the Wuhu Production Base, so as to improve the angling techniques and cultivate their temperament, and to allow more employees to get close to and embrace nature.



In addition, the Group believes that health is the foundation for employees to live and work efficiently. Therefore, we insist on guiding employees to pay more attention to their health through employee activities and publicity and education, gradually establish a healthy life concept and develop the habit of regular exercise to stay healthy. During the Reporting Period, the Group held a variety of health promotion activities at various production bases, including basketball, badminton, billiards, bowling and other ball game competitions, as well as healthy sports such as marathons and brisk walking. At the Wuhu Research and Development Centre, we provide fitness facilities and sports courses for employees to relieve their physical and mental health, such as yoga and dance, with an aim to encourage employees to be more active in daily life, which not only helps employees to strengthen their physical fitness, but also benefits to relieve work pressure and maintain emotional health.



The macroeconomic uncertainty have led to a wave of layoffs in many industries, and many enterprises have experienced wage cuts, wage frozen and welfare cuts, which have caused individuals' concerns about the stability of business operations and their own development. Therefore, the Group not only helps employees stay happy and energised through employee activities and daily communication but also strives to alleviate the root causes of their worries and anxieties. During the Reporting Period, despite the pressures of intensified industry competition, significantly higher operating costs and rising trade disputes, the Group has maintained steady development through excellent cost control and strategic scale expansion. The Group takes the initiative to share the results of its achievements with its employees, conducts annual reviews of their performance and remuneration in accordance with the established policy, continuously provides and improves employee welfare, medical insurance, housing and meal allowances, holiday benefits, employees' children education fund and other measures that can effectively reduce employees' economic pressure.

### TALENT CULTIVATION AND DEVELOPMENT

### **Talent Promotion**

Adhering to the concept of "meritocracy", the Group has established and continuously improved the promotion mechanism to build a diversified promotion ladder for all conscientious employees, provide sufficient development space, and ensure equal promotion and career development opportunities for all employees. The Group's promotion mechanism is based on regular appraisal of staff performance and key performance indicators. The promotion process is strictly implemented in accordance with the Group's established system to ensure fairness and impartiality and to eliminate all forms of discrimination and prejudice.

The quarterly and annual appraisals of employees are conducted by the department heads, the heads of the subsidiaries or the supervisors in charge, and monitored by the Management Committee. Based on the confirmed evaluation results, incentives or promotion opportunities will be offered to employees with excellent performance, and improvement measures will be proposed to those who do not meet the standards. The administrative department will assist in arranging, following up and evaluating the implementation progress and effectiveness of the improvement measures. The promotion of managerial personnel is based on the results of annual administrative assessment. The annual administrative assessment consists of two parts, the annual key performance indicator assessment and the additional administrative assessment, with a point deduction mechanism. The managerial personnel with higher comprehensive performance ranking will be given priority consideration for promotion. This motivates the managerial personnel not only to pay attention to production and economic indicators, but also to pay equal attention to the performance of ESG areas related to the Group's sustainable development, and to strive to improve the ESG performance of its own management areas to promote the realisation of the Group's long-term goals.

### **Talent Pipeline Development**

The Company has continued to optimise its talent structure through the introduction of external talents and internal talent training programmes. During the Reporting Period, the personnel structure and cadre ratio of the Company were further refined through talent development planning.

In order to seize development opportunities of the photovoltaic industry and meet the development needs of the Group, especially for the reserve of university talents, the Group implemented the "Hundred Talents Scheme" during the Reporting Period and recruited 100 university graduates to reserve professional and highly educated talents for each major business system. The Group arranges a one-year training period for university talents, including centralised training, business system job rotation, two-way job selection, one-on-one mentoring and follow-up feedback to consolidate and retain talents. The Group also implements an incentive mechanism for instructors, including cash and performance evaluation incentives, to encourage more employees who meet the qualifications of instructors to actively participate in the scheme, so as to provide more comprehensive, practical and theoretical professional guidance and help university talents to find suitable positions and integrate into the workplace more quickly.

### **Talent Capacity Development**

Systematic training is essential for employees to enhance their professional skills and comprehensive abilities and to achieve their career development goals. The Group organised employee training in accordance with the established employee training management policy and the administrative department of the Group or its subsidiaries are responsible for organising employee training. Internal training is arranged by production, technology, solar farms operation and maintenance, internal control centre, information centre, group safety committee office, company safety office and other departments that offer/receive the training services. According to the targeted employee group, training theme and based on the training effect, the Group flexibly adopts different forms of training, such as large-class training, small-class training, theoretical training and practical operation training. During the Reporting Period, the Group organised a total of 89,927 hours of internal training and engaged qualified external professional institutions to provide 26,411 hours of training to employees to meet the needs for professional knowledge and skills that were not covered by internal training.



The Group's employee training is broadly divided into two categories: technical training and skill training according to different needs, such as the Company's long-term development needs, customer needs, legal compliance requirements and employees' development needs. Technical training includes vocational skills training, safety training, integrity training and environmental protection training. Through vocational skills training, employees can enhance their professional ability to match job needs and have a deeper understanding of job requirements and responsibilities. Safety education and integrity training strengthen employees' safety awareness and integrity awareness through case analysis and education on the Group's management system, safety and integrity culture, so that employees can more consciously abide by the Group's established safety production management system and integrity management system. In addition, the Group hopes to convey the concept of "live and learn" to employees through skills training, and provide corresponding training resources for employees, so as to encourage employees to continuously improve their comprehensive personal abilities through learning and achieve self-enhancement. Therefore, the themes of skills training cover (but are not limited to) laws and regulations, leadership, time management, business writing and communication skills, digital skills, business etiquette, etc. During the Reporting Period, the Group provided 89,571 hours of technical training and 26,767 hours of skills training to employees respectively.

Practical operation training has a strict assessment system. In addition to examinations and assessments performed by their respective department, the administrative department also regularly follows, assesses and evaluates relevant training during and after the training to ensure the effectiveness. In addition, for special jobs and special positions, the Group conducts skill assessment and regular review in strict accordance with national laws and industry regulations and ensures that certificates are maintained. The Group also welcomes feedback from employees on the training content and internal training instructors through the Training Assessment Form, so that we can timely receive feedback from employees on the arrangement and effectiveness of training, which will help the Group to continuously optimise staff training arrangements and continuously improve training effectiveness. In addition, the Group has established an internal training lecturer team to fully utilise the internal talent resources of the Company, promote the inheritance and sharing of culture, knowledge and experience, and realise the internalisation of external knowledge accumulation.



### **OCCUPATIONAL SAFETY AND HEALTH**

### **Production Safety Management**

Xinyi Solar always places high importance to production safety, adheres to the concept of "People-oriented concept with caring for life and valuing health" and the awareness of safety red lines namely "Safety comes absolutely first", with strictly implementing the established production safety management system of the Group. By continuously improving or supplementing the newly refined management system, the Group is committed to providing employees with a safe and fully protected working environment. The Group strictly complies with the applicable laws and regulations related to safety production, such as the "Law of the People's Republic of China on Work Safety", "Provisions on Safety Training for Production and Operation Entities", "Measures for the Administration of Contingency Plans for Work Safety Incidents" and the "Factory & Machinery Act 1967". The Group has established and improved the production safety management system through formulation of the Production Safety Management System apart from strengthening process control of safety management, refining safety measures and deepening the investigation and treatment of safety hazards. Leveraging on enhanced safety education and training, the Group has tried to avoid the occurrence of safety accidents to form a standardised construction of enterprise safety management.

The Safety Committee of Xinyi Solar (the "Safety Committee") is the highest supervisory and decision-making body for the production safety management of the Group, led directly by the Group's chief executive officer. The committee supervises and manages production safety in accordance with established systems and standards related to production safety management, including hazard identification and management, risk assessment and graded control, safe operation of personnel and equipment management, and standardised use and management of labor protection equipment. The Group has set up a two-level safety management structure under the Safety Committee, with the first tier being the office of the Safety Committee of Xinyi Solar (the "Safety Committee Office") and the second tier being the safety management office of each corporate company (the "Company Safety Office"). The main responsibilities of each level of the organisation are as follows:

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Safety Committee The highest regulatory and decision-making body	<ul> <li>Arrange production safety work, make decisions on major safety management issues, authorise and supervise the Group Safety Committee Office to implement specific safety management work</li> <li>Organise the establishment, improvement and implementation of the production safety responsibility system for all employees</li> <li>Review and approve the Group's annual safety management plan, implementation plan and budget, and ensure that sufficient funds and resources are invested to support the production safety management of each subsidiary</li> </ul>		
Safety Committee Office         The standing body for         safety management	<ul> <li>Appoint safety management specialists and full-time safety officers to organise and implement safety management work in accordance with the arrangement of the Safety Committee</li> <li>Develop annual safety management work plan and formulate corresponding assessment plan to monitor and ensure the implementation of safety management goals and plans</li> <li>Assign full-time safety officers to each subsidiary for production safety management and provide resource support, and regularly assess the performance of full-time safety officers</li> <li>Supervise the implementation of the production safety responsibility system in all subsidiaries</li> <li>Organise all subsidiaries to carry out risk source identification and risk assessment, establish a dual mechanism for the prevention, investigation and management of major hazard installations, and formulate corresponding management systems, prevention and control measures and emergency plans for identified risks and hazard sources</li> <li>Supervise and check the safety-related work of each subsidiary such as safety training, emergency rescues, hazard sources and potential risk identification and management, occupational health management, fire management, and propose and implement improvement plans</li> <li>Monitor and evaluate the implementation of the production safety management system of each subsidiary and propose rectification measures and accountability suggestions for safety incidents</li> </ul>		

The dedicated production safety management bodyCompany Safety Office, and the full-time safety officers stationed at the enterprise serves as the deputy director, and other members include the head of the	<u>م</u>				
<ul> <li>Implement various safety work arrangements of the Safety Committee and the Group Safety Committee Office</li> <li>Implement the production safety responsibility system for all employees, and formulate a production responsibility system and a list for all employees based on job characteristics and management levels</li> <li>Formulate safety, fire protection, occupational health management plans and set annual goals, and implement supervision to ensure the implementation of plan and goals</li> <li>Based on the Group's safety management system, formulate, implement and contrinuously improve the applicable production safety rules and regulation operating procedures and emergency plans of the company</li> <li>Carry out potential risk identification, hazard source identification, risk assessment and control list and implement production safety rectification measures</li> <li>Organise safety education and training, reasonably allocate and supervise the standardised use of labour protection equipment by employees, and ensure the standardised use of labour protection equipment by employees, and ensure the standardised use of labour protection equipment by employees, and ensure the standardised use of labour protection equipment by employees.</li> </ul>	The dedicated production	<ul> <li>Company Safety Office, and the full-time safety officers stationed at the enterprise serves as the deputy director, and other members include the head of the department and consultants with professional and technical capabilities</li> <li>Implement various safety work arrangements of the Safety Committee and the Group Safety Committee Office</li> <li>Implement the production safety responsibility system for all employees, and formulate a production responsibility system and a list for all employees based on job characteristics and management levels</li> <li>Formulate safety, fire protection, occupational health management plans and set annual goals, and implement supervision to ensure the implementation of plans and goals</li> <li>Based on the Group's safety management system, formulate, implement and continuously improve the applicable production safety rules and regulations, operating procedures and emergency plans of the company</li> <li>Carry out potential risk identification, hazard source identification, risk assessment and control list and implement production safety rectification measures</li> <li>Organise safety education and training, reasonably allocate and supervise the standardised use of labour protection equipment by employees, and ensure that employees are qualified for safety education and only those qualified personnel are</li> </ul>			

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Since the implementation of safety production management with a new safety management structure in 2021, the Safety Committee has continuously promoted the construction of the Group's safety management system by strengthening the implementation of established systems and introducing detailed systems and measures, so as to realise institutionalised, standardised and refined management of safe production. The Group implements a dual prevention mechanism to identify, assess and hierarchically manage hazards and risks, and implements the established regional risk control measures in accordance with the "Hazard Source Identification and Risk Grading Control System". The Group especially strengthened the safety control of major risk areas, and eliminated potential safety hazards in a timely manner through regular inspections by safety officers and monthly safety hazard investigations, so as to further reduce safety risks. In order to further standardise and strengthen the safety risk control of major hazard sources, comprehensively reduce the Group's accident risks, curb major safety accidents related to the storage and use of hazardous chemicals, and ensure the safety and health of the Company's production and operation and employees. The Group formulated the "Management System for Major Hazard Sources", which clarifies the main responsible persons and their responsibilities in production and operation as well as technology and operation, regulatory processes and daily standardised management requirements, employee risk notification and safety training, etc. In addition, in order to strengthen the safety management and supervision of hazardous operations, prevent and reduce safety accidents, and ensure the safety of operators, the Group strictly implemented the "Management System for Highly Hazardous Operations", which clearly states:

- (1) the responsibilities of personnel related to hazardous operations, requiring operators to hold certificates to work, and guardians and operation leaders need to bear corresponding guardianship, education and supervision responsibilities;
- (2) all hazardous operations must strictly perform the approval procedures, and be approved and managed according to the hazard degrees of the operations;
- (3) operators and guardians must strictly implement relevant safety precautions, operators shall receive relevant safety education before operation and obey the command of on-site management personnel during operation, and abide by the operation site management system;
- (4) the corresponding working procedures and supervision of eight hazardous operations.

The implementation of the system is inseparable from effective supervision mechanism and the emphasis on safety of every employee. The "Job Safety Management Standards" is designed to clarify the specific responsibilities of production safety management at the managerial and operational level, and puts forward standardised process requirements and strict standards for the safe operation of personnel in various posts, the wearing of protective equipment, the operation status of equipment and facilities, safety protection devices and the work of related parties. Through daily, weekly and monthly safety inspections, the Group ensures the implementation of established standardised procedures and standards by employees and related parties, eliminates operations that violate the regulations, and requires corresponding departments to implement rectification and follow up the rectification of inspection items that fail to meet the standards, so as to avoid accidents caused by safety hazards. The Company Safety Office is responsible for the follow-up and management of the everyday inspection results, and the weekly and monthly inspection results are required to be reported to the Safety Committee of the Group to ensure that the existing safety hazards are timely understood at the Group level and the implementation of regulatory rectification measures.



Water and Power Outage Drill

Hazardous Chemical Leak Drill



Confined Space Emergency Drill

Fire Drill

In addition, the Group enhanced the awareness of safety red lines of all employees by implementing the safety production responsibility system for all employees and ensuring that all employees can clearly understand the potential safety risks of their posts, the safety responsibilities they should perform, and the importance and necessity of complying with the standard operating procedures of the post and regulations by strengthening safety training and education. The main person in charge of the Company's production safety work, specialised production safety management personnel, special operators and special equipment operators are all trained and certified in accordance with national regulations with 100% of new employees receiving pre-employment training. In 2024, the Group provided three levels of safety training to all new employees. Strict training and assessment were also set up to ensure that all employees have a correct safety concept from the time they join the company. The Group provided a total of 37,713 hours of new employee safety training, special safety training and routine safety training, with 31,610 participants. In addition, the Group has established an incentive mechanism through the implementation of the "Safety Management Incentive Policy" to encourage all departments and employees to improve their safety production performance, to gradually reduce and ultimately avoid safety accidents caused by human negligence. During the Reporting Period, the Group recorded 67 work-related accidents, with a work-related injury rate of 0.69 and 2,218 working days lost. Compared with the same period in 2023, all three indicators showed decline.

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XSG 11: Protect the health and safety of employees with an ultimate goal of zero harm			
Target type	Absolute		
Progress	No work-related death cases		
	• Work-related injury rate was 0.69		
XSG 11			

In addition, the Company has built a standard work-related accident investigation and handling process internally. If an accident occurs, the injured will be sent to medical treatment as soon as possible, and an accident investigation team will be set up for investigation. At the same time, improvement and corrective preventive measures will be formulated, and the progress of the implementation of the measures will be continuously followed up. During the Reporting Period, no employee of the company died due to work-related reasons. The investigation process for work-related accidents is as follows:

01	02	03	04
After a work-related accident occurs, the relevant responsible person shall perform the "accident quick report" process and send the injured to the hospital for treatment as soon as possible	An investigation team is established based on the accident situation to conduct investigation into the cause of the work-related accident according to procedures	After determining the corrective and preventive measures and the handling plan for the responsible person, the investigation report would be completed on the work-related accident	The Safety Committee, or the Safety Committee Office, which supervises the rectification, reviews the work-related accident investigation report
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### Safety Management of Related Parties

In addition to ensuring its own safe production, the management of related parties is also an important part of the Company's safety production activities. After establishing cooperative relationships with related parties, the safety management performance of related parties will have a practical impact on the safety performance of the Group. Therefore, the Group is committed to strengthening the safety management of related parties, aiming to build a safety community and work together to achieve sustainable safety production. The Group strengthens the personnel management of suppliers, contractors and other external institutions, teams and individuals related to the Group's production and operation activities and implements the responsibility system for safe production of all types of personnel at all levels. The Group strictly implemented the "Safety Management of Related Parties":

(1) requiring related parties to sign the "Agreement on Safety Production and Environmental Protection of Related Parties" to clarify the safety management responsibilities of both parties;

- (2) to review strictly the safety management system, safety training system and technical qualifications of foreign operators of related parties, and require related parties to conduct safety education and training for employees; and
- (3) related parties must provide adequate labour protection supplies and purchase labour insurance for their employees.

The Company Safety Office supervises and inspects the implementation of the requirements of related parties, while the Group Safety Committee Office is responsible for reviewing the related parties' documents for safety management system, construction operations and technical plans, relevant qualifications, employee insurance and safety training implementation.

### **Occupational Health Management**

Based on its strict compliance with the laws and regulations related to occupational safety and health in the country and the region where it operates, such as the "Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases", the "Occupational Safety and Health Act of 1994", and the "Regulations on Occupational Safety and Health", the Group formulated the internal systems including "Occupational Health Management Policy", the "Safety, fire protection and occupational health education and training management system" and the "Management Policy for Occupational Protection Supplies". Under the supervision of the Safety Committee and the Safety Committee Office, our occupational health and safety management is implemented by the Company Safety Office in accordance with the established occupational health management policy, which complies with the standards of international ISO45001:2018 Occupational Health and Safety Management Systems.

The Group strictly implements and regularly manages the declaration, procurement, distribution and use of occupational healthrelated work and labour protective equipment, so as to continuously improve the Group's occupational health management system, ensure that employees are provided with more adequate protection, to prevent, control and eliminate the occupational disease hazards, to improve the production and working environment, and to safeguard the lives, safety and physical and mental health of its employees. The relevant policies define the supervisory responsibilities of the Safety Committee. The Group Safety Committee Office is responsible for urging each subsidiary to strictly implement the established systems and conduct regular assessment. The Company Safety Office is responsible for formulating detailed implementation measures to ensure the implementation of relevant policies, regularly checking the development of relevant works, carrying out special training as needed and assessing the training effect to ensure that employees fully understand the Group's management system for occupational health and labour protection supplies, and continuously improve their occupational health professional knowledge and labour protection awareness, so as to strictly abide by the standardised operation procedures in daily work to protect their own safety.

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The Group strengthens five major areas of work and improving occupational health management in daily management to provide employees with more comprehensive protection:

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Legal compliance	<ul> <li>Compliance with local laws and regulations relating to occupational safety and health</li> <li>Arranging and supervising occupational health management in accordance with the Occupational Health Management System</li> </ul>
Strict supervision	<ul> <li>Under the supervision of the Safety Committee and the Group Safety Committee Office</li> <li>Establish an employee's personal occupational health management file, and the safety officer responsible for occupational health management has obtained the "Enterprise Occupational Health Manager Training Certificate"</li> <li>Making reasonable adjustments to work arrangements for special weather such as high temperature and workplaces that may cause physical burden to employees</li> <li>Develop and take corresponding protective measures for special processes</li> <li>Set up occupational health and safety affairs representatives to collect employees' opinions and suggestions on occupational health, safe production and labour protection, and provide regular feedback to supervisors</li> <li>Employees can also provide feedback on the Group's existing occupational health management system, work and protection measures through channels such as trade</li> </ul>
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Training and publicity	<ul> <li>Regular occupational health training is arranged to ensure that employees understand occupational hazards related to their positions, occupational disease prevention and protection and control measures, continuously improve their health awareness, and ensure that they consciously abide by the Group's established rules and regulations</li> <li>Set up an employee care team to carry out occupational health, labour protection and safety publicity in the factory on a daily basis to improve employees' occupational health and safety awareness</li> </ul>			
Labour protection	<ul> <li>Inform employees truthfully of occupational hazards and their impacts, occupational disease prevention measures and emergency response methods by signing occupational hazard notification letters, posting occupational hazard job notification cards on site, and promptly setting up occupational hazard notification instructions and warning signs next to affected workstations in the workplace. As of the end of the Reporting Period, all employees in the company's occupational prohibited positions have signed the occupational disease hazard notification</li> <li>Provide employees with adequate professional labour protection supplies according to the needs of different departments and job positions, and arrange special training for labour protection supplies to ensure that employees understand the relevant systems of the Group and the correct use of labour protection supplies</li> <li>Arrange qualified professional institutions to test occupational hazards in the production site every year, including noise, high temperature, air quality, etc., to ensure that the working environment meets the standards and is continuously improved</li> <li>Reasonably arrange working hours and provide necessary personal protective equipment to reduce employees' exposure level and physical load, and protect their health</li> <li>Conduct evaluation of the status of occupational hazards at least every three years</li> </ul>			
Health protection	<ul> <li>Provide pre-employment and annual health check-ups for employees to ensure that they are regularly informed of their health conditions</li> <li>Ensure that employees in specific positions are covered by a full cycle of pre-employment, in-employment and off-employment medical check-ups, and establish occupational health monitoring files for employees</li> <li>Purchase critical illness insurance for employees to provide additional protection and reduce the impact of critical illness on employees and their families</li> </ul>			

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The Company attaches great importance to the occupational health and safety of employees and adopts comprehensive occupational health protection measures to effectively prevent and control the occurrence of occupational hazards in the working environment and the occurrence of occupational diseases among production line employees. Benefiting from the effective implementation of the measures, there were no cases of occupational diseases in the company during the Reporting Period, and various occupational health risks were effectively controlled.

This section presents the Group's performance in business development, governance, economy, environment, employment, safety and society for 2024. The data collection and calculation methods used in this Report are consistent with the Hong Kong Stock Exchange's "Reporting Guidance on Environmental KPIs" and "Reporting Guidance on Social KPIs", unless otherwise stated, and follow the quantification and consistency principles to provide quantifiable KPIs performance and ensure the comparability between current year data and historical data. Additional remarks will be made for the calculation methods and/or reference coefficients that need special explanation. Unless otherwise stated, the data provided in this section are annual figures for the year or the figures as of 31 December. In the event that previous figures need to be restated, the reasons will be explained accordingly. Following the Hong Kong Stock Exchange's recommendation, on the basis of disclosing the data of key performance indicators, in accordance with the ESG Reporting Guide", the Group also made reference to other international best practices/ photovoltaic-industry related reporting standards, such as the Global Reporting Initiative (GRI), "Sustainability Accounting Standards for the Solar Technology & Project Developers Industry" issued by the SASB. Supplementary disclosures are made for some of the applicable indicators and other key performance indicators.

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Business Performance			
Sustainable Business Development	2024	2023	2022
Addition in production capacity of solar glass (tonnes per day)	4,400	6,000	6,000
Production capacity of solar glass in operation (tonnes per day) (as of 31 December)	23,200	25,800	19,800
Capacity ratio in areas with high/extremely high baseline water pressure	0%	0%	0%
Addition in grid-connected capacity of solar farms (MW)	300	1,094	806
Number of new projects delayed due to ecological impacts	0	0	N/A <sup>Note 1</sup>
Cumulated grid-connected capacity of solar farms (MW) (as of 31 December)	6,244	5,944	4,879
Total fixed asset investment in grid-connected and under-construction solar farm projects			
(as of 31 December) (RMB million)	21,232	19,944	16,824 <sup>Note 2</sup>
Annual electricity generation capacity of solar farms (million kWh)	6,389.1	5,036.2	4,395.9

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### Note :

(1) Not disclosed in 2022

(2) The 2022 balance sheet items have been converted into RMB using the year-end exchange rate

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Governance Performance			
Business Ethics	2024	2023	2022
Number of anti-corruption training sessions	33	33	44
Number of employees receiving anti-corruption training	756	508	3,632
Percentage of employees receiving anti-corruption training Note 1	7.8%	4.6%	43%
Percentage of employees in key departments and positions receiving anti-corruption training Note 2	100%	100%	100%
Average hours of anti-corruption training Note 3	1.24	1.08	1.34
Concluded legal proceedings involving the Group or its employees	1	0	0
Confirmed case of termination or non-renewal of contracts with business partners <sup>Note 4</sup> due to corruption offences	0	0	0
Confirmed case of termination or non-renewal of contracts with			
business partners <sup>Note 4</sup> due to breach of the principle of good faith and fair trading	0	0	0

Notes:

(1) Percentage of employees receiving anti-corruption training = number of employees receiving anti-corruption training during the Reporting Period/total number of serving employees at the end of the year

(2) Percentage of employees in departments/positions identified by the Internal Control Centre as having potential corruption risks in their daily work and business development, such as sales, purchasing, finance, project development, who received anti-corruption training during the Reporting Period

(3) Average hours of anti-corruption training = hours of anti-corruption training/number of employees trained during the Reporting Period

(4) Suppliers that provide products/services to the Group/partners having dealings with the Group in the corresponding period

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Product Responsibility	2024	2023	2022
Product recyclable ratio Note 1	98-100%	98-100%	98-100%
Product reusability ratio Note 2	95%	95%	95%
Weight of product recovered during the Reporting Period (tonnes) $^{\mbox{Note}3}$	N/A	N/A	N/A
Proportion of products that contain IEC 62474 declarable			
substances/arsenic-containing substances/beryllium			
compounds/antimony compounds	0%	0%	0%

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Notes:

- (1) According to the preparation notes of the "Physical Method for Recycling and Treatment of Crystalline Silicon Photovoltaic Modules, 100% recovery rate of solar glass can be achieved by different treatment methods, where only mechanical crushing treatment method will lead to 98% qualified recovery rate, while other methods can achieve 100% qualified recovery rate
- (2) This value is an estimate. According to the research by GreenMatch, a British institution, the glass reuse rate in crystalline silicon modules can reach 95%. With reference to "General Technical Requirements for the Recycling and Reuse of PV Modules in China"(GB/T39753-2021), solar glass can be used directly in the production of PV modules after processing if it is recycled as intact glass and the parameters such as light transmittance can meet the standard requirements for solar glass for modules. Therefore, the Group believes that the overall reusability of the products is high, but it is not possible to reach 100% because of the wastage during processing, so 95% is a reasonable estimate
- (3) Since solar glass is a component of PV modules, the recycling and reuse of solar glass in waste PV modules is a part of PV module recycling. According to the "General Technical Requirements for the Recycling of Photovoltaic Modules in China" (GB/T39753-2021), waste photovoltaic modules should be handed over to qualified organisations for dismantling and processing, and the recycling and processing organisations should comply with the "Technical Specification on the Environmental Protection of Centralised Zone for Dismantling, Utilisation and Disposal of Waste Electrical and Mechanical Products (Trial)" (HJ/T181-2005). As photovoltaic module recycling in China is still in the stage of development and exploration of technical standards and has not yet been scaled and industrialised. According to the current regulations of China on the main responsibilities of recycling entities and the qualification to perform the services. Therefore, the Group did not provide the service of recycling solar glass from waste PV modules by the end of 2024

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Sustainable Supply Chain	2024	2023	2022
Number of suppliers	3,959	3,136	2,841
By geographical region			
Mainland China	3,608(91.1%)	2,878(91.8%)	2,600(91.5%)
Others	351(8.9%)	258(8.2%)	241(8.5%)
Percentage of suppliers meeting regular assessment Note 1	100%	100%	100%

Note:

(1) Such figure refers to the periodic assessment pass rate of suppliers providing product/services to the Group during the corresponding period

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Customer Management	2024	2023	2022
Percentage of products sold or shipped that have to be recalled			
due to safety and health concerns	0%	0%	0%
Complaint cases related to products and services	139	192	164
Complaint handling rate Note 1	100%	100%	100%
Customer satisfaction (score)	95	95	95

Note:

(1) Complaint handling rate = number of complaint cases handled in accordance with the Group's internal procedures with the outcome recognised by the customers/total number of complaint cases received in the corresponding period

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Economic Performance			
Sustainable Capital Investment and Income	2024	2023	2022
Total capital investment by asset class Note 1 (RMB million)	4,705	8,955	5,948 <sup>Note 2</sup>
Share of capital investment in photovoltaic industry	100%	100%	100%
Revenue by asset class Note 1 (RMB million)	21,921	24,164	17,678 <sup>Note 2</sup>
Solar glass production and sales Note 1	18,820	21,359	15,208 <sup>Note 2</sup>
Solar power generation and sales Note 1	3,017	2,691	2,347 <sup>Note 2</sup>
Others Note 1	84	114	123 <sup>Note 2</sup>
Share of green revenue Note 1	99.6%	99.5%	99.3%

Note:

- (1) In line with the FTSE Russell's Green Revenues Classification System, the Group's two core businesses (solar glass manufacturing and solar farms) are classified under the green sectors of "solar equipment" and "energy production solar energy", respectively
- (2) The 2022 profit or loss and balance sheet items have been converted into RMB by using the average and year-end exchange rates, respectively
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Other Key Financial Indicators	2024	2023	2022
Direct economic value (RMB million)			
Produced Note 1	21,962	24,339	17,924 <sup>Note 2</sup>
Allocated Note 3	21,381	21,881	15,725 <sup>Note 2</sup>
Retained Note 4	581	2,458	2,199 <sup>Note 2</sup>
Earnings performance			
Consolidated revenue (RMB million)	21,921	24,164	17,678 <sup>Note 2</sup>
Consolidated net profit attributable to shareholders (RMB million)	1,008	3,843	3,281 <sup>Note 2</sup>
Earnings per share – basic (RMB)	11.27	43.17	36.88 <sup>Note 2</sup>
Dividend per share (HKD)	10.00	22.50	20.00
Asset positions			
Net assets value attributable to shareholders (RMB million)	29,052	29,138	26,628 <sup>Note 2</sup>
Bank and cash balance (RMB million)	973	3,534	4,806 <sup>Note 2</sup>
Bank loans (RMB million)	11,640	9,573	7,188 <sup>Note 2</sup>
Net gearing ratio	31.0%	17.5%	7.6%
Current ratio	1.14	1.15	1.80

Notes:

- (1) The direct economic value produced includes revenue, other income, other losses, net, impairment losses of financial and contract assets, share of profit/loss of investments accounted for using the equity method, finance income as disclosed in the consolidated income statement
- (2) The 2022 profit or loss items and balance sheet items have been converted into RMB by using the average and year-end exchange rates, respectively
- (3) The direct economic value allocated includes cost of sales, selling and marketing expenses, administrative and other operating expenses, finance costs, income tax expense and dividend as disclosed in the consolidated financial statements
- (4) Direct economic value retained = Direct economic value produced Direct economic value allocated

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Environmental Performance			
Environmental Performance of Solar Glass Business	2024	2023	2022
Greenhouse gas emissions			
Total greenhouse gas emissions Note 1 (Scope 1+2+3)			
(tonnes of CO <sub>2</sub> equivalent)	7,849,204	N/A	N/A
Total greenhouse gas emissions (Scope 1+2)			
(tonnes of CO <sub>2</sub> equivalent)	6,669,758	5,710,230	3,929,933
Direct greenhouse gas emissions (Scope 1) Note 2	5,432,651	4,490,174	3,003,130
Indirect greenhouse gas emissions (Scope 2) Note 3	1,237,107	1,220,056	926,803
Indirect greenhouse gas emissions (Scope 3) Note 1 and 4	1,179,446	N/A	N/A
Greenhouse gas emissions intensity (Scope 1+2)			
(kg of CO <sub>2</sub> equivalent/m <sup>2</sup> of finished product)	4.57	4.99	5.69
Direct greenhouse gas emissions intensity (Scope 1) Note 5	3.69	3.91	N/A
Indirect greenhouse gas emissions intensity (Scope 2) Note 5	0.87	1.08	N/A
Air pollutants management			
Nitrogen oxides (NO <sub>x</sub> )			
Amount of emissions (tonnes)	4,036	4,285	3,455
Emission reduction ratio Note 6	93.9%	92.6%	90.3%
Sulphur dioxide (SO <sub>2</sub> )			
Amount of emissions (tonnes)	1,571	1,593	1,518
Emission reduction ratio Note 6	85.6%	83.2%	74.4%
Particulates (smoke and dust)			
Amount of emissions (tonnes)	171	186	141
Emission reduction ratio Note 6	96.8%	95.7%	94.4%

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Environmental Performance			
Environmental Performance of Solar Glass Business	2024	2023	2022
Energy management			
Total energy consumption (MWh)	20,464,638	17,540,379	11,561,961
Direct energy consumption Note 7	18,203,182	15,395,782	10,186,141
i) Share of non-renewable energy	94.82%	95.18%	94.51%
Natural gas	94.75%	95.12%	94.43%
Gasoline/diesel	0.07%	0.06%	0.08%
ii) Share of renewable energy Note 8	1.71%	1.41%	1.64%
iii) Share of self-produced energy Note 9	3.47%	3.41%	3.85%
Indirect energy consumption Note 10	2,261,456	2,144,597	1,375,820
Share of energy consumption from renewable			
energy sources Note 5	1.52%	1.24%	N/A
Share of energy consumption from grid-supplied			
electricity Note 5	11.05%	12.23%	N/A
Total energy consumption intensity (kWh/m <sup>2</sup> of finished product)	13.97	15.31	16.74
Direct energy consumption Note 5	12.38	13.40	N/A
Indirect energy consumption Note 5	1.59	1.91	N/A
Water Management			
Total water consumption Note 11 (million m <sup>3</sup> )	13.112	12.153	10.490
By usage			
Production water consumption Note 12	12.481	11.641	10.094
Domestic water consumption Note 13	0.631	0.512	0.396
By source Note 5			
Natural water resources	10.223	9.210	N/A
Municipal water supply (third-party water supply)	2.889	2.943	N/A
Capacity ratio in areas with high/extremely high			
baseline water pressure	0%	0%	0%
Utilisation rate of recycled water	96.3%	96.0%	94.6%
Water consumption intensity (m <sup>3</sup> /m <sup>2</sup> of finished product)	0.009	0.011	0.015
Total amount of sewage discharge Note 5 and 14 (million m <sup>3</sup> )	5.024	6.240	N/A

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Environmental Performance			
Environmental Performance of Solar Glass Business	2024	2023	2022
Packaging material management			
Total amount of packaging materials used (tonnes)	86,737	74,317	67,864
Wood, wood slats and wood pallets	33,845	29,746	33,000
Paper and paper boxes	39,835	32,066	24,508
Plastic, plastic stripes and plastic tapes	12,946	12,401	10,275
Other packaging materials	111	104	81
Packaging materials consumption			
intensity (g/m <sup>2</sup> of finished products)	61	66	99
Utilisation rate of iron pallets in domestic sales Note 1	86.9%	N/A	N/A
Waste management			
Hazardous waste			
Total amount of hazardous wastes generated (tonnes)	310.8	188.4	248.6
Compliant disposal rate of hazardous waste Note 15 (%)	100%	100%	100%
Hazardous waste intensity (g/m² of finished product)	0.22	0.17	0.36
Non-hazardous waste			
Total amount of non-hazardous wastes generated (tonnes)	143,390	129,629	61,611
Non-hazardous waste intensity (g/m² of finished product)	101.0	115.4	89.6

Notes:

(1) This represents newly disclosed data for 2024, with no relevant data disclosures for 2023 and 2022.

- (2) Direct emissions (Scope 1) are greenhouse gas emissions generated directly from solar glass furnaces due to the consumption of fuel (natural gas) and the decomposition of raw materials in the production of glass, calculated according to the formula proposed in the "Accounting Methods and Reporting Guide on Greenhouse Gas Emissions of Enterprises Producing Flat Glass in China"
- (3) Indirect emissions (Scope 2) are greenhouse gas emissions indirectly generated from the Group's consumption of electricity purchased from external sources, calculated according to the formula proposed in the "Accounting Methods and Reporting Guide on Greenhouse Gas Emissions of Enterprises Producing Flat Glass in China". In calculating indirect greenhouse gas emissions for 2024, reference is made to the national average carbon dioxide emission factor for electricity as stated in the "2021 Electricity Carbon Dioxide Emission Factor" report released by the Ministry of Ecology and Environment and the National Bureau of Statistics on 12 April 2024, standing at 0.5568 tons of carbon dioxide per megawatt-hour (MWh). In calculating indirect greenhouse gas emissions in 2023, reference is made to the latest national grid average emission factor of 0.5703 tonnes of CO<sub>2</sub>/MWh as specified in the Notice of the Management of Greenhouse Gas Emissions Reports for Electric-generating Corporates 2023-2025 issued by the Ministry of Ecology and Environment on 7 February 2023. In calculating the emission factors used in 2022 were the average carbon emission factors applicable for different production bases

- (4) Scope 3 greenhouse gas emissions are classified, accounted for and reported on indirect emissions in the value chain in accordance with the Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard (《溫室氣體核算體系:企業價值 鏈 (範圍3) 核算與報告標準》). The calculation of scope 3 greenhouse gas emissions is based on the actual situation of Xinyi Solar and the characteristics of the industry in which it operates and is assessed using data collected from internal stakeholders and industry data estimates.
- (5) Not disclosed in 2022
- (6) Reduction in air pollutants emissions = (1 Such type of air pollutant emissions/Amount generated) × 100%
- (7) In accordance with the recommendations of the "Reporting Guidance on Environmental KPIs", the Group has included internally generated energy from equipment owned/controlled by the Group (i.e., electricity generated from residual heat power generation equipment and rooftop distributed PV power generation equipment) when accounting for direct energy consumption
- (8) Energy consumption from renewable energy refers to the electricity generated by the rooftop distributed photovoltaic power generation equipment owned by the Group used in the production of solar glass
- (9) Energy consumption from self-produced energy refers to the electricity generated by the residual heat generation equipment owned by the Group in the production of solar glass
- (10) Indirect energy consumption represents indirect energy purchased from external sources and consumed by the Group, i.e. electricity supplied by local power companies
- (11) Water consumption is the amount of fresh water intake, which mainly consists of tap water supplied by local municipal water supply enterprises (third-party water supply) and natural water resources (seawater, river water, etc.)
- (12) Production water consumption is calculated based on the amount of fresh water intake consumed in production, i.e., it is equivalent to total water intake, excluding recycled water consumption
- (13) Domestic water consumption is calculated based on the amount of water billed for the living area and is apportioned in the proportion to the number of employees in the living area
- (14) Total amount of sewage discharge is the volume of effluent discharged which is treated internally by the Group in compliance with the applicable laws and regulations of each production base and then carried to the local municipal sewage treatment plant through designated sewage pipes
- (15) Qualified enterprises were engaged for temporary storage and disposal of hazardous waste in strict accordance with the procedures and requirements for disposal of hazardous waste under the applicable laws and regulations of each production base. Therefore, the compliant disposal rate of hazardous waste was 100%

Environmental Performance of Solar Farm Business Note1	2024	2023	2022
Annual power generation of solar farms (million kWh)	6,389.1	5,036.2	4,395.9
Equivalent to standard coal savings Note 2 (thousand tonnes)	1,926.9	1,514.4	1,325.4
$CO_2$ emission reduction Note 2 (thousand tonnes)	5,245.4	4,149.8	3,639.8
Electricity demand of households to be met <sup>Note 3</sup>			
(thousand households)	2,129.7	2,098.4	1,831.6
Equivalent to the amount of trees planted (thousand trees)	228,061.8	180,426.5	158,254.2

Notes:

- (1) Solar energy is a renewable energy source and the photovoltaic power generation process does not involve the consumption of energy and water and therefore produces virtually no air pollutants and wastewater discharge. The Group has singled out the environmental performance indicators of the solar farm business to present more clearly the positive environmental performance of the green electricity generated from the solar farm projects held by the Group in the corresponding years
- (2) The figures are calculated based on the annual conversion factors of the corresponding year provided in the "Annual Report on the Electricity Industry in China" published by the China Electricity Council
- (3) According to the data released by the National Energy Administration in 2024, the per capita household electricity consumption will increase to nearly 1,000 kWh. Assuming that each household has three people, the annual electricity consumption of each household is 3,000 kWh. The data in 2023 and 2022 is calculated based on 2,400 kWh of annual electricity consumption for each household.

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Employment Performance			
Employee Overview	2024	2023	2022
Number of employees	9,645	11,063	8,459
By employment type			
Full-time	100%	100%	100%
Part-time	N/A	N/A	N/A
By gender			
Female	21.5%	21.1%	21.1%
Male	78.5%	78.9%	78.9%
By age group			
≤30	34.4%	40.0%	38.3%
31-40	38.4%	35.4%	35.6%
41-50	20.8%	19.4%	20.6%
≥51	6.4%	5.2%	5.5%
By geographical region			
Mainland China	85.1%	89.8%	89.4%
Malaysia	13.8%	9.9%	10.2%
Indonesia	0.8%	_	_
Other regions	0.3%	0.3%	0.4%
By employment category			
Senior management	0.4%	0.4%	0.4%
Middle management	1.5%	1.0%	1.1%
General employees	98.1%	98.6%	98.5%

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Employment Performance			
Employee Overview	2024	2023	2022
Turnover rate of employees Note 1	46.0% <sup>Note 2</sup>	28.4%	30.4%
By gender			
Female	31.7%	28.2%	50.2%
Male	32.8%	28.5%	25.1%
By age group			
≤30	49.5%	37.1%	46.7%
31-40	27.7%	26.2%	22.8%
41-50	21.2%	19.7%	19.2%
≥51	8.2%	8.8%	7.9%
By geographical region			
Mainland China	47.4%	29.1%	28.8%
Malaysia	34.7%	22.6%	45.1%
Indonesia Note 3	98.7%	N/A	N/A
Other regions	3.6%	20.0%	9.1%

Note:

- (1) Turnover rate = Number of resigned employees in the category/total number of employees in the category at the end of the Reporting Year
- (2) During the Reporting Period, several production lines were shut down due to market demand, resulting in a reduction in staffing and an increase in employee turnover
- (3) As the project is in the early stages of planning and development, the staff base is relatively small and changing staff is frequent, resulting in a higher turnover rate

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Training and Development	2024	2023	2022
Total hours of training received by employees	116,338	88,138	102,643
Average hours of training received by employees Note 1	12.1	8.0	12.1
By gender (hours)			
Female	10.2	8.0	10.7
Male	12.6	8.0	12.5
By employee category (hours)			
Senior management	0.4	1.4	10.0
Middle management	20.1	5.1	35.1
General employees	12.0	8.0	11.9
Number of employees trained	77,733	75,349	98,524
By gender			
Female	21.7%	24.9%	18.5%
Male	78.3%	75.1%	81.5%
By employment category			
Senior management	0.01%	0.06%	0.17%
Middle management	0.69%	0.53%	3.12%
General employees	99.30%	99.41%	96.71%
Number of employees trained			
coverage ratio Note 2 and 3	10,545(109.33%)	11,014(99.6%)	6,983 (82.6%)
Coverage ratio by gender Note 2 and 3			
Female	123.4%	119.4%	74.3%
Male	105.5%	94.2%	84.7%
Coverage ratio by employee category Note 2 and 3			
Senior management	14.3%	25.6%	51.5%
Middle management	52.5%	70.7%	63.3%
General employees	110.5%	100.1%	82.9%

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Notes:

- (1) Average hours of training received by employees = Total hours of training received by employees/Total number of employees at the end of the Reporting Period
- (2) Training coverage ratio of different employee categories = Number of employees trained in the category/Total number of employees in the category as of the end of the Reporting Period
- (3) The number of employees trained is the actual number of employees trained in the Reporting Year, one person is counted once only and is not double counted. Due to the suspension of production of several production lines due to market demand during the Reporting Period, the staffing was reduced, any training received by the relevant employees during the Reporting Year will be counted as part of the number of employees receiving training, and therefore the training coverage ratio may be greater than 100%

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Occupational Safety and Health Performance	2024	2023	2022
Case of work-related fatalities Note 1	0	0	0
Work-related fatal accident rate Note 2	N/A	N/A	N/A
Number of work-related injuries Note 3	67	78	57
Work injury rate Note 4	0.69	0.71	0.67
Number of workdays lost <sup>Note 5</sup>	2,218	2,331	1,953
Number of workdays lost due to work-related			
injuries per 100 full-time employees equivalent Note 6	23.0 Note 7	21.1	22.0
Case of occupational disease Note 8	0	0	N/A
Total hours of safety training (hours)	37,713	31,525	32,896
Number of employee trained	31,610	29,595	32,001

Notes:

- (1) The definition of work-related fatalities is consistent with the definition of the relevant local labour laws
- (2) The Work-related fatal accident rate is calculated according to the requirements of GRI 403: Occupational Health and Safety 2018 Disclosure Item 403-9
- (3) Based on the definition under the relevant labour laws in the places where the Group operates, excluding the traffic accidents while commenting to and from work on transportation not provided by the Group or minor work-related injuries
- (4) Work injury rate is the number of reported work-related injuries per 100 full-time employees equivalent
- (5) Workdays lost represents the absence for one or more workdays lost due to work-related injuries (including the day of injury)
- (6) Workdays lost due to work-related injuries per 100 full-time employees equivalent (or the rate of workdays lost) = total workdays lost/ total working hours\*annual working hours per 100 full-time employees equivalent. Annual working hours per 100 full-time employees equivalent is calculated by referencing to the standard working hours required by the local labour laws in each of the locations where our business operates.

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- (7) Due to the suspension of production of several production lines due to market demand during the reporting period, staffing was reduced. Although the number of lost workdays decreased, the number of workdays lost due to work-related injuries per 100 full-time equivalent employees increased slightly
- (8) In compliance with the occupational disease as defined in the occupational disease under local labour laws and regulations, no relevant data disclosed in 2022.

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Social Performance	2024	2023	2022
Charitable donations (RMB'000)	6,262	16,643	11,414 <sup>Note 1</sup>
Share of fishery-PV and agricultural-PV			
complementary solar farm projects Note 2	63.6%	66.7%	56.3%

Notes:

(1) It has been converted into RMB using the average exchange rate in 2022

(2) Combining photovoltaic power generation with fishery farming/agriculture planting, the fishery-PV and agricultural-PV complementary projects can be an effective way to promote income generation for local farmers and fishermen, and each 100 mu of agricultural-PV complementary project can promote the stable employment of about 12 farmers

# Appendix I: Awards and Certifications

#### AWARDS





## Appendix I: Awards and Certifications

#### **CERTIFICATIONS**



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