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JA SOLAR SUSTAINABILITY AND ESG REPORT 2024



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JA SOLAR TECHNOLOGY CO., LTD.

JASOLAR



ABOUT THIS REPORT

Reporting Period

- This is an annual report covering the period from January 1, 2024, to December 31, 2024 (hereinafter referred to as the "reporting period"). To improve the integrity of the Report, some data may exceed the above range (subject to the specific date indicated).

Reporting Boundary

- The Report covers JA Solar Technology Co., Ltd. and its subsidiary production sites, which is consistent with the scope of the disclosure in the JA Solar Technology Co., Ltd. 2024 Annual Report. Some production sites consist of multiple companies. Where individual companies are involved in the Report, they will be reflected as such; otherwise, the name of the associated production site will be used. For ease of presentation, "JA Solar Technology Co., Ltd." is also referred to as "JA Solar" , "the Company" or "we" in the Report.

Report Release

- This is the seventh sustainability report/ESG report/social responsibility report released by JA Solar and its subsidiaries. The last report was published in April 2024.

References

- This Report is prepared in accordance with the *Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange - Sustainability Report (For Trial Implementation)* (hereinafter referred to as the "Shenzhen Stock Exchange Guidelines"). Meanwhile, this Report also references authoritative standards and guidelines such as the *Sustainability Reporting Standards* of Global Reporting Initiative (GRI Standard 2021) of the Global Sustainability Standards Board (GSSB), the United Nations Sustainable Development Goals (SDGs), the Ten Principles of the United Nations Global Compact (UNGC), the *IFRS Sustainability Disclosure Standards of International Sustainability Standards Board* (ISSB), and the *European Sustainability Reporting Standards* (ESRS).

Report Principles

- **Materiality:** During the preparation process, this Report comprehensively identifies the main stakeholders and their concerns regarding sustainability issues, and makes targeted disclosures on sustainability matters based on the relative importance of these concerns. Details of the double materiality assessment results in this Report can be found in the sections "Stakeholder Engagement" and "Double Materiality Assessment" later in the document.
- **Quantitative:** This Report presents key performance indicators (KPIs) related to ESG quantitatively and provides detailed disclosures of the Company's quantifiable performance data over the past three years in the "Key Performance Table". The measurement standards, methods, assumptions, and/or calculation tools for the KPIs in this Report, as well as the sources of conversion factors used, have been explained in the corresponding sections.
- **Balance:** The content of this Report reflects objective facts, ensuring impartial disclosure of both positive and negative information related to the Company during the reporting period.
- **Consistency:** This Report maintains consistency with relevant content from previous years. If there are any information changes, they have been explained in the corresponding sections.

Reliability Assurance

- The Company guarantees that the contents of the Report do not contain any false records or misleading statements. The majority of the data in the Report was derived from the Company's original operational records and publicly disclosed official documents, such as its quarterly and annual reports. Unless otherwise specified, the amounts disclosed in the Report are measured in RMB.

Report Statement

- The financial data involved in the Report comply with the *Accounting Standards for Business Enterprises* and relevant accounting systems promulgated by the state and have been audited according to the China Internal Auditing Standards, truly reflecting the financial indicators and operating conditions of the Company. The Report has been reviewed and audited internally by the Company and a report assurance agency has been engaged to provide guidance and evaluation to ensure that the Report is true, accurate, and complete. JA Solar hopes to enhance communication with stakeholders through the release of the Report.

Report Access

- JA Solar hopes to enhance communication with stakeholders through the release of the Report. The Report can be accessed online and is available in both Chinese and English. You can access the electronic version of the report on the Company's official website at <http://www.jasolar.com>. In case of any ambiguity in the comprehension of the Chinese and English content, the Chinese version shall prevail.

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MESSAGE FROM THE CHAIRMAN

Sustainable development stands as a pivotal issue of our era. ESG, as a key indicator of corporate development quality and value, has been comprehensively embedded within the ecosystem of businesses. Guided by the G2G sustainability philosophy of "Green to Green, Green to Grow, Green to Great", JA Solar integrates ESG across business operations, striving to achieve a win-win growth between commercial and social value, while setting a new benchmark in the industry.

As a global leading provider of photovoltaic power generation solutions, we remain resolutely committed to making green and affordable energy a reality worldwide. In 2024, we sustained significant R&D investments, driving technological progress, improving quality and efficiency, and delivering high-power, ultra-reliable solutions to our customers. We also accelerated the rollout of integrated PV and storage systems and multi-scenario application solutions with products covering a wider range of regions and application scenarios. In 2024, JA Solar shipped 79.447 GW of PV modules (including 1.547 GW for self-use), achieving avoided emissions of over 50 million tCO₂e based on various countries' grid emission factors, propelling the global transition towards green energy.

Environmental protection is our priority and a green ecosystem is actively built at JA Solar. In 2024, we launched our "Together Towards Tomorrow" responsible supply chain strategy, collaborating closely with upstream and downstream partners to build a greener, low-carbon value chain. We also introduced our 4F Environmental Strategy - Faster, Foster, Fairer, Further - and unveiled our inaugural TCFD Report at COP29. JA Solar was the world's first photovoltaic enterprise joining the TNFD Adopter. We take practical steps to advance global environmental governance and protect biodiversity for a sustainable future where humanity and nature thrive together in harmony.

We champion the culture of diversity, equity, and inclusion (DEI) and foster an enabling global workplace. The Xingtai Polytechnic Institute of New Energy, founded by JA Solar, has successfully commenced enrollment and operations, emerging as a key talent pipeline for the development of the renewable energy sector. We actively fulfill our corporate social responsibility by donating to improve educational conditions in impoverished areas, safeguarding the rights of women and children, improving the well-being of local communities, and driving social development.

2025 marks JA Solar's 20th anniversary. Amid evolving global dynamics, we hold firm to the belief that "the world is progressing". Staying true to our mission of "Developing solar power to benefit the planet", we will continue collaborating with global partners to advance clean energy, enable a better future, and safeguard our green planet with unwavering original aspiration and enduring forward efforts.

Jin Baofang
Chairman of JA Solar
April, 2025

ABOUT JA SOLAR

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COMPANY PROFILE

JA Solar Technology Co., Ltd. ("JA Solar") is a global leader in PV power generation solutions. Founded in 2005, JA Solar was listed on NASDAQ in 2007. After being privatized and delisted from the US stock market in 2018, it was officially listed on the A-share market of the Shenzhen Stock Exchange (stock code: 002459) in 2019. JA Solar, which was both established and registered publicly in Ningjin County, Hebei Province, has its headquarters located in No.8 Building, Nuode Center, East Auto Museum Road, Fengtai District, Beijing. Since 2010, the Company has begun its journey from a monocrystalline solar cells segment to a vertically integrated PV industrial chain covering upstream and downstream, and after nearly two decades of hard work, we have built an industrial system that integrates the coordinated development of three major business groups: photovoltaic and energy storage, smart energy, and materials and equipment. The photovoltaic and energy storage business group covers multiple production segments including silicon rods, wafers, PV cells, PV modules, and energy storage. As of the end of 2024, JA Solar's module production capacity reached 100 GW, with wafer and cell production capacities exceeding 80% and 70% of the module capacity, respectively. The Company has 16 overseas sales companies and has built a vertically integrated industry chain encompassing silicon wafers, cells, modules, and PV power plants, with more than 30,000 employees. The Company's product sales and service network spans 178 countries and regions worldwide, with module shipments ranking among the top globally for several consecutive years. With innovation as the driver for growth, we continuously leverage digitalization and intelligent technologies to empower our business and pursue high-quality development. Our product technology consistently ranks at the forefront of the industry. As of the end of 2024, JA Solar held 1,899 authorized patents, including 1,031 invention patents. The Company has established a global modern enterprise management system, backed by a core management team that holds profound insights into global PV industry technology, business development paths, and future trends. With continuous technological innovation, robust financial power, and a well-developed global sales and service network, JA Solar has been widely recognized by domestic and international customers. Moreover, it has been listed in the "Fortune China 500" and "Global Top 500 New Energy Enterprises" for consecutive years.

2024 Key Performance Indicators

Number of overseas sales companies

16

Number of countries and regions covered by sales and service network

178

Module production capacity

100GW


Number of valid patents

1,899

Vision	Being a great enterprise
Mission	Developing solar power to benefit the planet
Core Values	Being customer-centered, promoting welfare for our staff members, and creating value for the owners
Spirit	Being genuine, simple, respectful and restrained, grateful
Motto	To be an upstanding and responsible person and apply oneself with integrity and industry

SUSTAINABILITY IMPACT MAP

ESG RATINGS

CNI Index ESG Rating "AAA" - Industry ranking: Top 1%	AAA	
Wind ESG Rating "A" - Industry ranking: Top 4%	A	
SynTao Green Finance ESG Rating "A" - Industry ranking: Top 2%	A	
MSCI ESG Rating "BB"	BB	
S&P Global Corporate Sustainability Assessment (CSA) score of 48	48	
Morningstar Sustainalytics ESG risk rating score of 30.5 drops to 23.7 ¹	23.7	
Proactive response to the CDP's climate change questionnaires, with "B" rating (management level)	B	
EcoVadis Sustainability Rating or Silver Medal - Global ranking: Top 6%	Silver Medal	
Refinitiv ESG Rating: 76 - Industry ranking: Top 7%	76	
JA Solar's Yangzhou and Fengxian Production Sites were awarded the SSI ESG Audit Silver Medal	Silver Medal	

SUSTAINABILITY AWARDS

Award	Awarded by
Listed in <i>Sustainability Year Book (China Edition) 2024</i>	S&P Global
Featured in the 2024 Fortune China ESG Impact List	Fortune Media Group
Solar Prosumer Award Energy Transition Award	EUPD Research
Green Pioneer Case Green Energy Development Case	International Financial News
2024 IPC China ESG Benchmark Enterprise Award	IPC
Certificate of the Best Case for Climate Action on 520 Social Responsibility Day	CCM CSR Promotion Center
2024 Corporate ESG “Best Corporate Governance Responsibility Award”	Sina Finance
Selected in the “Top 100 Pioneers among China’s ESG Listed Companies” List for Two Consecutive Years	Financial Program Center of China Media Group
2023-2024 Intelligent Zero Carbon Achievements	Xinhua News Agency
Excellent Case of Green Development for 2024 by the Beijing News Zero Carbon Research Institute	Beijing News
Best Practice of Green Trade Development of China’s Machinery and Electronic Industry	China Chamber of Commerce for Import and Export of Machinery and Electronic Products, Zhejiang Department of Commerce, Deloitte China
Selected on the 2024 Top 100 Sustainable Development (ESG) Listed Companies in China Energy	China Energy Research Society, Beijing Green Credit Rating Co., Ltd.
2024 “Top 500 Private Enterprises in China” and “Top 500 Private Manufacturing Enterprises in China”	All-China Federation of Industry and Commerce
Best Practice Cases of Sustainable Development of Chinese Listed Companies by China Association for Public Companies for Two Consecutive Years	China Association for Public Companies
“Second Guoxin Cup · Top 100 ESG Golden Bull Award”	China Securities Journal

¹ Morningstar Sustainalytics is a leading global ESG research, rating and data institution. Its ESG risk rating comprehensively assesses the major ESG risks faced by companies and their corresponding risk management capabilities. The lower the rating score is, the lower the company's risk is and the better its ESG governance performance is.

SUSTAINABILITY IMPACT

1.17

Zhang Zhengwei, Special Advisor to the Chair of the International Sustainability Standards Board and Director of the Beijing Office visited JA Solar for special research on ESG



2.27

JA Solar was invited to attend the Sixth Session of the United Nations Environment Assembly



3.15

JA Solar officially pledged to join the "Forward Faster" Initiative of the United Nations Global Compact (UNGC)



3.15

JA Solar was invited to attend the Sustainable Markets Initiative (SMI) CEO Spring Summit and delivered a speech



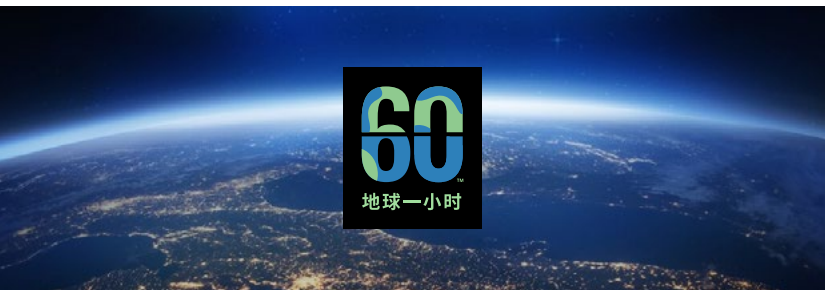
3.18

JA Solar launched the "Global Green and Low-carbon Industry and Commerce Development" Initiative



3.23

In collaboration with the World Wildlife Fund (WWF), JA Solar advocated for "Give an Hour for Earth" during the annual "Earth Hour" event



3.25

A delegation led by United Nations Assistant Secretary-General Selwin Hart visited JA Solar



4.24

JA Solar was invited to attend the World Business Council for Sustainable Development (WBCSD) Liaison Delegate Meeting 2024



4.29

JA Solar was invited to attend the 2024 ZGC Forum - ESG for a Beautiful China and participated in a roundtable dialogue



5.28

JA Solar signed the United Nations Women's Empowerment Principles (WEPs)



6.25

JA Solar was invited to attend the China SIF Summer Summit



6.27

JA Solar was invited to the Re: Think 2024 United Nations Development Programme SME Week Roundtable Forum



7.03

JA Solar was invited to attend the WBCSD Two Lakes Dialogue - International Cooperation Dialogue for Green and High-quality Development



8.15

JA Solar attended the International Symposium on Environment, Development, and Human Rights: Green and Low-Carbon Development in the Process of Modernization



9.05

JA Solar was invited to attend the 2024 Summit of China-Africa Cooperation Forum



9.22

JA Solar was invited to attend the 2024 Climate Week NYC and delivered a thematic speech



9.26

JA Solar became the world's first photovoltaic company to join the TNFD Adopter



10.19

JA Solar was invited to attend the International Youth Sustainable Innovation Summit



11.06

JA Solar was invited to attend the Parallel Session on Sustainable Trade Amid Climate Change of the Hongqiao International Economic Forum at the China International Import Expo and delivered a speech



11.14

JA Solar was invited to attend the 2024 APEC CEO Summit and the APEC Sustainable Business Night



11.12

Jin Baofang, Chairman of JA Solar, and Jin Junhui, Director and Assistant President of JA Solar, were invited to attend the first day of the 29th session of the Conference of the Parties (COP29) to the UN Framework Convention on Climate Change (UNFCCC) and delivered a keynote speech via video



11.18

JA Solar held a press conference at COP29 and officially released the Company's first Climate-related Disclosure Report and TCFD Report



SUSTAINABILITY MANAGEMENT

Amid the new round of transformation in the social development of humankind, sustainable development has emerged as a key driver of social progress. As a practitioner, leader, and advocate of sustainability, JA Solar has established a comprehensive sustainability management framework, featuring a three-tier governance structure and a sound, clear, transparent set of policies to ensure effective implementation. The Company also actively integrates sustainability principles into its business strategy, fostering a differentiated sustainability-driven business model and corporate culture. With these efforts, we endeavor to share the fruits of development and jointly create sustainable value with all stakeholders.

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G2G SUSTAINABILITY PHILOSOPHY

JA Solar's original aspiration is closely related to the sustainable development of energy, humanity, and the world. Based on JA Solar's corporate culture and the UN SDGs, Chairman Jin Baofang formally proposed the G2G Sustainability Philosophy of JA Solar at the 28th United Nations Climate Change Conference (COP28).



Green to green

Sustainability Concept

Developing solar power to benefit the planet



Since our inception, we have been committed to the mission of "Developing solar power to benefit the planet". In practice, we build green factories using green electricity, engage in green production, create green products, and ultimately produce green electricity, forming a closed-loop green ecosystem.

JA Solar's "Green to Green" philosophy is deeply rooted in the core of the circular economy. Starting with solar energy, we embark on a green journey, closing the product life cycle. We firmly believe that the continuous development of green energy will ultimately convene into a powerful force driving the Earth towards a green future, paving the way for sustainable development for humanity.



Green to grow

Sustainability Strategy

Being customer-centered, promoting welfare for our staff members, and creating value for the owners



We uphold the core values of "Being customer-centered, promoting welfare for our staff members, and creating value for the owners". At a critical time for climate transition, JA Solar is steadfastly joining hands with all parties in the thriving wave of the renewable energy industry, embarking on a new journey.

We are aware that green energy is the bond that connects our dreams. With the clean power of solar energy, JA Solar is willing to work hand in hand with employees, customers, and all stakeholders to jointly promote global energy transition, grow together, and share the fruits with our labor.



Green to great

Sustainability Vision

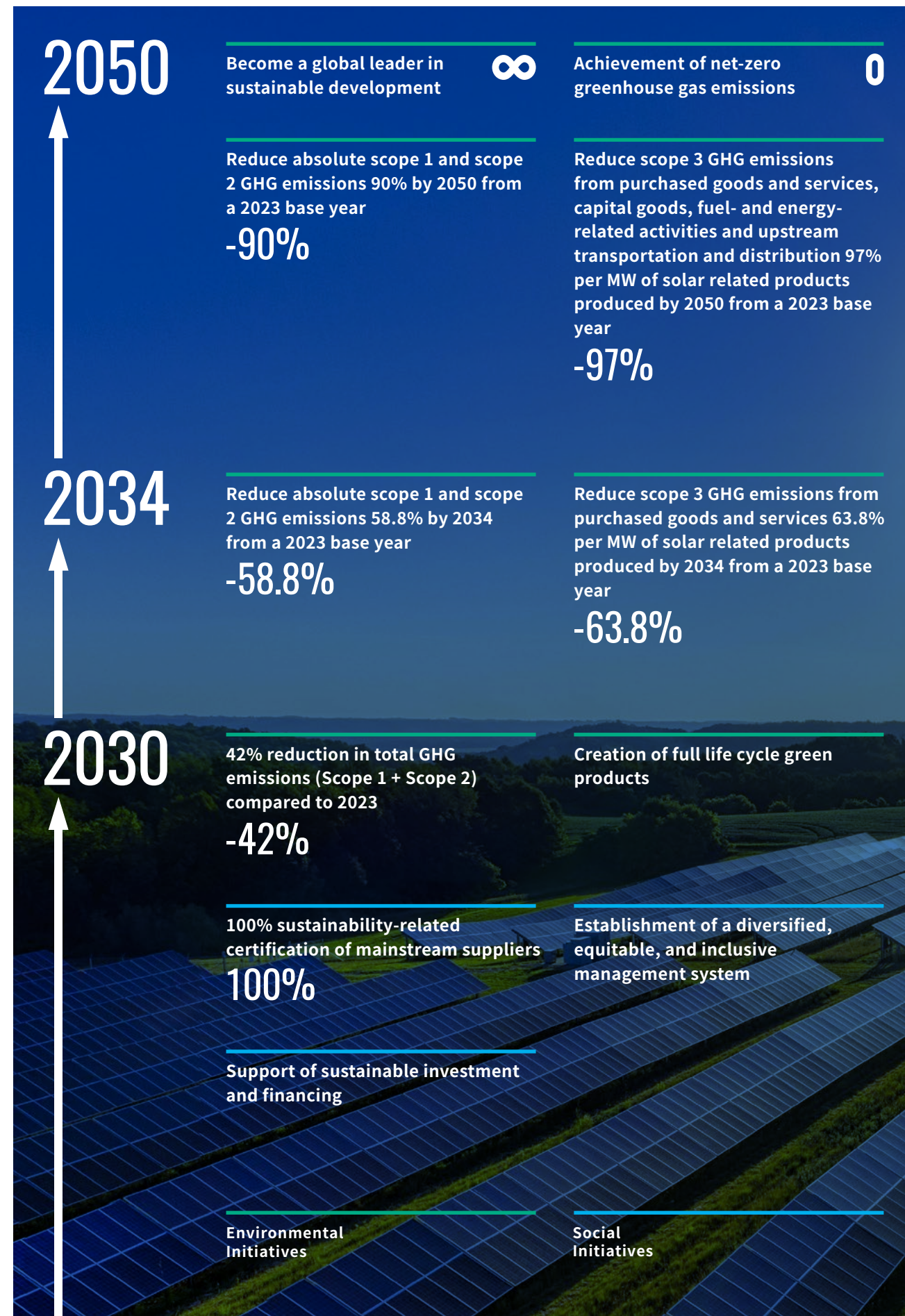
Being a great enterprise



With the vision of "Being a great enterprise", JA Solar has evolved from zero to greatness, from scale development to value symbiosis in the green wave since 2005.

"Greatness" is embodied in the diligent fulfillment of every responsibility, the bold breakthroughs in every innovation, and the in-depth development of every collaboration. It is also reflected in the active involvement in the global sustainable development landscape, the careful planning of a grand blueprint for a green future for humanity, and the profound imprint left on the global photovoltaic brand map.

JA Solar, with green as its foundation, continuously builds an inclusive and symbiotic ecological network, enables win-win outcomes for the environment, society, and economy, and contributes to a great future of sustainability for humanity.



2024 JA Solar Sustainability Theme

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4F

FASTER Collaboration for Sustainable Win-win Growth

Faster denotes JA Solar's proactive stance in leading industry innovation. JA Solar leverages R&D innovation as its engine, deepening the collaborative mechanism with value chain partners, and enhancing the responsiveness of the industrial chain through technological iteration and process optimization. We continuously explore cutting-edge technological directions, share challenges and achievements with customers and partners in a dynamic market environment, and build a vibrant and sustainable industrial ecosystem.

FOSTER Net-zero Pathway Drives Circular Development

Foster embodies JA Solar's sense of responsibility in practicing its zero-carbon vision. JA Solar, eyeing the entire lifecycle in its production process, strengthens sustainability models and provides clean energy solutions for global low-carbon transition. We continuously promote the harmonious coexistence and resonance of corporate development, energy transition, and natural ecology for a zero-carbon future.

FAIRER Unite to Build A Fair Society

Fairer carries JA Solar's positive aspirations for a better future society. Always focusing on every individual, and striving to provide equitable career opportunities for social development, we work hand in hand with diverse industry partners to practice social responsibility through concrete actions. We excel in creating and achieving and aim to build a community of shared opportunities and responsibilities.

FURTHER Solid Governance Ensures Long-Term Prosperity

Further highlights JA Solar's strategic determination for long-term sustainable development. JA Solar actively improves its governance mechanisms, solidifying its development foundation, and deeply embedding the concept of sustainability into its steady and responsible operations. We make ongoing efforts to enhance organizational resilience to lay a solid foundation for long-term value creation and enable an organic unity of corporate sustainability and social benefits.

SUSTAINABILITY GOVERNANCE

Sustainability Governance Framework

To cater to the Company's strategy and sustainability needs as well as strengthen our sustainability governance capacity, we have created a three-tier sustainability governance framework covering the decision-making, management, and implementation level and clarified the functional division of each level in ESG management for more synergy within the organization. Meanwhile, We continue to optimize our team structure and elevate organizational capacity to improve our governance system. In 2024, the Company renamed the former ESG Management and Sustainability Committee to the ESG and Compliance Management Committee for an in-depth integration of risk control and sustainable development. We also released the *JA Solar Environmental, Social, and Governance (ESG) Sustainability Policy* to further the implementation of sustainability management work.



Decision-Making Level
Strategy and Sustainability Committee

The Board of Directors is the highest decision-making body for JA Solar's ESG work, conducting at least two reviews of ESG-related matters each year. The Board of Directors has established a "Strategy and Sustainability Committee" responsible for leading and supervising the Company's sustainability efforts. The Board of Directors has formulated the *Charter of the Strategy and Sustainability Committee of the Board of Director* to guide the formulation of the Company's ESG strategy and policies, oversee and approve the development of climate and ESG strategies and goals, and regularly oversee and review aspects such as progress towards goals and the effectiveness of methods to achieve those goals.

Management Level
ESG and Compliance Management Committee

The management committee has renamed the original ESG Management and Sustainability Committee to the ESG and Compliance Management Committee, which is responsible for formulating the Company's sustainability strategy and goals, implementing the strategic deployment from the decision-making level, and has established the *Rules of Procedure of the ESG and Compliance Management Committee* to promote the advancement of ESG-related matters and regularly review the progress of ESG-related goals.

Implementation Level
ESG Management and Sustainability Department

The Implementation Level has established the ESG Management and Sustainability Department and formed a collaborative working group with key related departments, responsible for implementing resolutions related to ESG, climate, and sustainability, participating in ESG practices, promoting the implementation of related initiatives, and coordinating relevant personnel from various centers/departments/production sites to achieve integrated and collaborative work.

Expertise of Board of Directors in Climate Change



Independent Director Zhao Yuwen

With a background in the energy industry, he has served as Honorary Director of the Photovoltaic Committee of the China Renewable Energy Society since 2017. He participates in shaping the Company's energy development plans and strategic direction.



Independent Director Qin Xiaolu

With a background in finance and accounting and as a senior accountant, she closely follows the Company's climate-related disclosures under the Task Force on Climate-related Financial Disclosures (TCFD) and offers practical guidance on climate change.



Independent Director Zhang Miao

She has a legal and compliance background and previously served as a prosecutor and director in the Public Prosecution Department of the Dongcheng District People's Procuratorate in Beijing. She is currently a senior partner at Beijing Hylands Law Firm, where she leads legal compliance efforts related to climate change and ESG governance at JA Solar.

Remuneration Linkage

The Company continues to strengthen the involvement of its Board of Directors and senior management in sustainability governance. In 2024, the Company further refined its executive KPI evaluation system by linking performance targets to key sustainability issues. These include environmental management, human capital development, business ethics, and information security. By incorporating these topics into performance assessments and directly connecting them to the compensation and incentive system, the Company is promoting a closed-loop approach to ESG management and performance evaluation. This not only underscores the Company's strong commitment to enhancing sustainability governance but also ensures the efficient implementation of its sustainability strategy through a structured, institutionalized approach.

Responsible Investment

JA Solar embeds ESG concepts deeply into its investment strategy, promotes financing and investment for sustainable development goals, and continuously improves relevant systems while advancing their implementation. The Company has revised the *Equity Investment Business Management System* and added investigation questions regarding environmental risk assessment, social responsibility fulfillment, and corporate governance structure during the due diligence phase before project investment, ensuring that the ESG performance of investment targets is evaluated in investment and merger decisions, and conducting investigations and tracking of GHG emissions for invested enterprises. In addition, in international project investments, we further strengthen our research on ESG policies in different countries and regions to ensure that investment projects comply with local regulatory requirements, lower ESG policy risks, and ensure the long-term sustainable development of the enterprise.

Training and Empowerment

To elevate the comprehensive management level of ESG, the Company's directors, supervisors, and senior management actively participate in training related to sustainability, understanding topics such as climate and carbon targets, the evolution of ESG development, and domestic and international policy trends, to continuously raise awareness and increase capabilities related to sustainability and optimize governance. In 2024, our Board of Directors actively participated in sustainability training on themes such as responsible investment, ESG ratings, and science-based targets.

STAKEHOLDER
ENGAGEMENT

JA Solar actively builds a sound internal and external communication platform and establishes a smooth and transparent communication mechanism with stakeholders through diverse communication channels to convey the Company's latest developments and extensively listen to the voices of stakeholders. We gain a deep understanding of their concerns and expectations regarding the Company's development and timely response to demands and expectations for a long-term relationship of mutual trust.

Key Stakeholders	Key Issues of Concern	Communication Channels	Feedback and Practice
Customers	Product Quality and Safety Customers' Rights and Interests Protection Information Security and Privacy Protection	Product Launch Conference Networking Meeting Customer Appreciation Meeting Customer Service Hotline Industry Exhibitions, etc.	Research and develop innovative products and ensure product quality Communicate customer feedback, perform customer research, conduct satisfaction surveys, and ensure information security
Government and Regulatory Authorities	Compliance and Risk Management Anti-corruption and Business Ethics Emissions and Waste Management Corporate Governance Combating Climate Change Biodiversity and Ecosystem Protection	Government-related Meetings and Websites Policy Recommendation Channels, etc.	Disclose information regularly Optimize internal control and compliance management systems Enhance anti-corruption and anti-fraud management Conduct corporate integrity and anti-corruption training Take measures and actions in response to changes Improve the environmental monitoring system
Shareholders and Investors	Compliance and Risk Management Corporate Governance Sustainability Governance	Shareholders' Meeting Performance Briefing Roadshow On-site Reception Investor Communication Activities Online Messages Emails, etc.	Collect investor information through communication channels Respond to investors' inquiries Disclose information regularly Optimize internal control and compliance management system
Suppliers and Partners	Product Lifecycle Stewardship Sustainability Governance Supplier Management	Supplier Communication Conference Supplier Training Daily Supplier Management, etc.	Research and develop green products, and seek product carbon footprint certification Improve the supplier management system Dynamically evaluate and audit suppliers Create a list of outstanding suppliers Maintain daily supplier communication
Executives	Anti-corruption and Business Ethics Compliance and Risk Management Corporate Governance Sustainability Governance	Company Meeting Daily Communication, etc.	Promote compliance system development Conduct business ethics training Improve sustainability strategy
Employees	Human Capital Development Diversity and Equal Opportunity Occupational Health and Safety	Employee Communication Employee Training Employee Expansion and Team-building Activities, etc.	Establish a scientific human resource management system and promotion mechanism Establish employee communication mechanism Strengthen occupational health and safety management Employee satisfaction survey Regularly hold team-building or cultural and sports activities
Media, NGOs, Industry Associations, etc.	Sustainability Governance Product Quality and Safety Community Impact and Development	Associations and Initiatives Joining Visits Organization Public Welfare Activities, etc.	Strengthen cooperation and communication with NGOs Participate in industry exchange and seminars
Community	Community Impact and Development Biodiversity and Ecosystem Protection Emissions and Waste Management	Public Welfare Activities Environmental Protection Activities, etc.	Conduct biodiversity research Carry out public welfare, volunteer, assistance, and donation activities to support community development through resource allocation

DOUBLE
MATERIALITY
ASSESSMENT

The response and implementation of the principle of materiality is the beginning and foundation for our sustainability-related information disclosure. To effectively identify, understand, and respond to the close attention of various stakeholders to the Company's sustainability practices, JA Solar regularly conducts comprehensive assessments of the importance of sustainability issues. In 2024, JA Solar identified and analyzed material sustainability issues through policy analysis and extensive research among internal and external stakeholders, providing a reference for the orderly advancement of sustainability and the disclosure of relevant information. The Company conducts the double materiality assessment based on the Shenzhen Stock Exchange's *Guidelines* for determining the criteria for impact materiality and financial materiality and refers to the latest international disclosure standards such as *GRI 3: Material Topics*, *European Sustainability Reporting Standards (ESRS)*, and *International Financial Reporting Sustainability Disclosure Standard No. 1 - General Requirements for Disclosure of Sustainability-related Financial Information (IFRS S1)* to update assessment methods, incorporating a financial perspective into the previous impact materiality assessments.

Assessment Process

Steps	Main Work
Understanding of the Company's Activities and Business Relationships	1 Understand the sustainability context in which the Company operates by interpreting domestic and international sustainability standards, the Company's business operations, product services, value chain, and industry conditions
Establishment of a List of Issues	2 Based on the Company's actual situation and engagement with internal and external stakeholders, conduct preliminary identification and screening of relevant sustainability issues, and analyze the actual and potential impacts, risks, and opportunities related to these issues
Materiality Assessment and Confirmation	3 Evaluate and rank the materiality of issues based on the Company's situation, industry development trends, and authoritative research from both domestic and international sources, and form a materiality matrix and define the boundaries of material issues
Review and Reporting	4 After review and approval by the Board of Directors and the management team, disclose material issues with higher materiality in the report for the reporting period

List of Issues and
Assessment of
Impacts, Risks, and
Opportunities








In light of JA Solar's sustainability and business practices, and in accordance with authoritative domestic and international standards and assessment methods, as well as the results of stakeholder engagement, JA Solar consolidated and updated sustainability-related issues in 2024. Based on the issues set by the Guidelines of Shenzhen Stock Exchange, specific issues have been added based on actual circumstances. We identified a total of 21 material issues relevant to the Company's situation, including 7 environmental issues, 9 social issues, and 5 governance issues. Meanwhile, we have preliminarily identified and analyzed the actual and potential impacts, risks, and opportunities related to the Company's sustainability issues, and comprehensively sorted out its current and future major financial impacts on the Company's operating results, business income, etc. (*Note: For details, please refer to the attached Assessment of sustainability Issues and Impacts, Risks, and Opportunities*)



ENVIRONMENTAL ISSUES

List of Sustainability Issues and Impacts, Risks and Opportunities Assessment

Issue	Impact Scope	Impact Period	Positive Impact	Adverse Impact	Risk	Opportunity
1Combating Climate Change	Self-operation Upstream value chain Downstream value chain Community	Medium to Long Term	○	○	○	○
2Energy Management	Self-operation	Medium to Long Term	○	○	○	○
3Product Lifecycle Stewardship	Self-operation Upstream value chain Downstream value chain	Short, Medium, and Long Term	○	○		○
4Biodiversity and Ecosystem Protection	Self-operation Upstream value chain Downstream value chain Community	Long Term	○	○	○	○
5Emissions and Waste Management	Self-operation Community	Short Term	○	○	○	
6Water Resource Use and Management	Self-operation Community	Medium to Long Term	○	○	○	
7Environmental Management System	Self-operation Community	Short, Medium, and Long Term	○	○	○	○

Corresponding SDGs	Corresponding Chapter
	FOSTER Environmental Chapter Net-zero Pathway Drives Circular DevelopmentP061-068
	FOSTER Environmental Chapter Net-zero Pathway Drives Circular DevelopmentP073-074
	FOSTER Environmental Chapter Net-zero Pathway Drives Circular DevelopmentP083-085
	FOSTER Environmental Chapter Net-zero Pathway Drives Circular DevelopmentP081
	FOSTER Environmental Chapter Net-zero Pathway Drives Circular DevelopmentP077-080
	FOSTER Environmental Chapter Net-zero Pathway Drives Circular DevelopmentP075-076
	FOSTER Environmental Chapter Net-zero Pathway Drives Circular DevelopmentP069-070

Short term: Within 1 year; Medium term: 1-5 years; Long term: More than 5 years

SOCIAL ISSUES

List of Sustainability Issues and Impacts, Risks and Opportunities Assessment

Issue	Impact Scope	Impact Period	Positive Impact	Adverse Impact	Risk	Opportunity
8 Product Quality and Safety	Self-operation Downstream value chain	Long Term	○	○	○	○
9 Supplier Management	Self-operation Upstream value chain Downstream value chain	Medium to Long Term	○	○	○	○
10 Human Capital Development	Self-operation Downstream value chain	Medium to Long Term	○	○	○	○
11 Community Impact and Development	Downstream value chain Community	Long Term	○			○
12 Industry Development Promotion	Self-operation Upstream value chain Downstream value chain Community	Medium to Long Term	○		○	○
13 R&D Innovation and Intellectual Property Protection	Self-operation	Long Term	○		○	○
14 Customers' Rights and Interests Protection	Downstream value chain	Long Term	○		○	○
15 Occupational Health and Safety	Self-operation	Medium to Long Term	○		○	
16 Diversity and Equal Opportunity	Self-operation Community	Medium to Long Term	○			○

Corresponding SDGs	Corresponding Chapter	
	FASTER	P044-047
	Product and Service Chapter Collaboration for Sustainable Win-win Growth	
	FASTER	P051-058
	Product and Service Chapter Collaboration for Sustainable Win-win Growth	
 	FAIRER	P089-097
	Social Chapter Unite to Build A Fair Society	
  	FAIRER	P107-112
	Social Chapter Unite to Build A Fair Society	
 	FAIRER	P103-106
	Social Chapter Unite to Build A Fair Society	
 	FASTER	P037-042 P128
	Product and Service Chapter Collaboration for Sustainable Win-win Growth	
	FASTER	P048-050
	Product and Service Chapter Collaboration for Sustainable Win-win Growth	
	FAIRER	P097-102
	Social Chapter Unite to Build A Fair Society	
 	FAIRER	P089-097
	Social Chapter Unite to Build A Fair Society	

Short term: Within 1 year; Medium term: 1-5 years; Long term: More than 5 years

GOVERNANCE ISSUES

List of Sustainability Issues and Impacts, Risks and Opportunities Assessment

Issue	Impact Scope	Impact Period	Positive Impact	Adverse Impact	Risk	Opportunity
17Anti-corruption and Business Ethics	Self-operation Upstream value chain	Medium to Long Term	○	○	○	○
18Compliance and Risk Management	Self-operation Downstream value chain	Short, Medium, and Long Term	○	○	○	○
19Corporate Governance	Self-operation Upstream value chain Downstream value chain	Long Term	○			○
20Sustainability Governance	Self-operation Upstream value chain Downstream value chain	Long Term	○			○
21Information Security and Privacy Protection	Self-operation Upstream value chain Downstream value chain	Medium to Long Term	○	○	○	○

Corresponding SDGs	Corresponding Chapter
	FURTHER P125-127 Governance Chapter Solid Governance Ensures Long-Term Prosperity
	FURTHER P121-124 Governance Chapter Solid Governance Ensures Long-Term Prosperity
	FURTHER P115-117 Governance Chapter Solid Governance Ensures Long-Term Prosperity
	FURTHER P015-016 Governance Chapter Solid Governance Ensures Long-Term Prosperity
 	FURTHER P129-130 Governance Chapter Solid Governance Ensures Long-Term Prosperity

Assessment Method

During the reporting period, we conducted a double materiality assessment through various methods such as surveys, interviews, and expert evaluations, actively communication with stakeholders including management, investors, customers, suppliers, government, industry associations, and experts worldwide. A total of over 4,000 questionnaires were collected in this double materiality assessment, laying a strong foundation for comprehensive assessment.

Impact Materiality

We comprehensively assessed both positive and negative impacts, actual occurrences, and potential impacts. We evaluated multiple dimensions such as impact scale, impact scope, occurrence probability, and irreparability, to determine whether the performance of sustainability-related issues would have a significant impact on the environment, economy, and society.

Financial Materiality

We assessed the likelihood of occurrence and the degree of financial impact from short-term, medium-term, and long-term periods. We evaluated the impact of relevant issues on the Company's business model, operations, and financial indicators from multiple aspects such as resource availability and relationship dependency.

Short term: Within 1 year; Medium term: 1-5 years; Long term: More than 5 years

Assessment Results

The results of the double materiality assessment for the year 2024 are presented in the matrix below, where 10 issues were identified as both financial materiality and impact materiality to the Company. The following results are comprehensively evaluated by the Company's internal finance department, the ESG Management and Sustainability Department, and other relevant departments, as well as external industry experts, based on insights from the Company, industry, and both domestic and international perspectives. They are subsequently reviewed and approved by JA Solar's financial experts, the ESG and Compliance Management Committee, and the Board of Directors.

Management of Material Issues

During the reporting period, JA Solar continuously refined its ESG management indicator system and established a multi-level framework encompassing dimensions, issues, and indicators. This system integrates both qualitative and quantitative management aspects. Relevant ESG issues and indicator targets were assigned to corresponding departments, enabling ongoing tracking of ESG metrics, goals, and performance to drive continuous improvement in sustainability efforts. All issues identified as financially material to the Company have been presented in an unstructured format in the relevant sections of this report, in accordance with the 4 key elements of governance, strategy, risk management, and metrics and targets.



E	No.1	Combating Climate Change	No.5	Emissions and Waste Management
	No.2	Energy Management	No.6	Water Resource Use and Management
	No.3	Product Lifecycle Stewardship	No.7	Environmental Management System
	No.4	Biodiversity and Ecosystem Protection		
S	No.8	Product Quality and Safety	No.13	R&D Innovation and Intellectual Property Protection
	No.9	Supplier Management		
	No.10	Human Capital Development	No.14	Customers' Rights & Interests Protection
	No.11	Community Impact and Development	No.15	Occupational Health and Safety
G	No.12	Industry Development Promotion	No.16	Diversity and Equal Opportunity
	No.17	Anti-corruption and Business Ethics	No.20	Sustainability Governance
	No.18	Corporate Governance	No.21	Information Security and Privacy Protection
	No.19	Compliance and Risk Management		



SUPPORTING THE ACHIEVEMENT OF THE UN SDGs

Integrating the UN SDGs into its strategy and operations, JA Solar identifies SDGs related to the Company and its value chain and actively takes actions to accelerate the progress of SDGs.

UN SDGs



No Poverty

End poverty in all its forms everywhere.



Good Health and Well-being

Ensure healthy lives and promote well-being for all at all ages.



Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.



Gender Equality

Achieve gender equality and empower all women and girls.



Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all.



Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable, and modern energy for all.



Decent Work and Economic Growth

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.



Industry, Innovation and Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.

JA Solar's corresponding actions

The Company leverages its industry strengths and allocates resources to support social welfare initiatives such as inclusive education. Meanwhile, it continues to advance photovoltaic deployment across various regions, helping economically underdeveloped or resource-scarce countries and areas achieve both economic growth and environmental benefits.

At all production and operational sites, the Company actively promotes occupational health and safety, ensuring the well-being of its employees.

We continue to implement key public welfare projects such as the "100 Hope Primary Schools Donation Project" and the "10,000 Needy Students Financial Support Project". In addition, the Company has invested in the establishment of the Xingtai Polytechnic Institute of New Energy to promote regional education equity. To cultivate talent in a systematic and multidimensional way, the Company has also established JA Solar Business School to support both horizontal and vertical career development.

By signing the *United Nations Women's Empowerment Principles (WEPs)* and issuing policies such as the *JA Solar Diversity, Equity, and Inclusion Policy*, the Company promotes gender equality, fosters an inclusive and equitable corporate culture, and actively supports the development of its female employees.

The Company has improved its water resource management system, implemented comprehensive wastewater control, and continuously optimized water-saving measures to improve water use efficiency.

Through strategic investments in high-efficiency solar cells, new materials, and energy storage technologies, the Company aims to enhance photovoltaic power generation efficiency, reduce costs, and optimize product performance—while delivering tailored, low-carbon solar solutions for diverse application scenarios worldwide.

Committed to providing a fair and safe workplace, the Company offers comprehensive employee benefits to safeguard well-being. It supports career growth through systematic training and ensures long-term development opportunities via a robust compensation management system.

Driven by technological innovation, the Company provides efficient, clean, and integrated solutions for the global energy transition, with efforts spanning R&D, manufacturing, low-carbon products, and comprehensive service offerings. It also actively engages in international initiatives, industry dialogue, and technical exchange to drive collective progress in innovation.

UN SDGs



Reduced Inequalities

Reduce inequality within and among countries.



Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient, and sustainable.



Responsible Consumption and Production

Ensure sustainable consumption and production patterns.



Climate Action

Take urgent action to combat climate change and its impact.



Life on Land

Life on Land Protect, restore, and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation, and curb the loss of biodiversity.



Peace, Justice, and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.



Partnerships for the Goals

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

JA Solar's corresponding actions

Through policies such as the *JA Solar Code of Conduct* and *JA Solar Diversity, Equity, and Inclusion Policy*, the Company upholds workplace equality, strictly prohibits discrimination and harassment, and fosters a diverse and inclusive environment for employees of all genders, ages, ethnicities, regions, and religions, while respecting and protecting labor rights.

We actively explore and provide customized, integrated green smart solutions for different application scenarios. The Company has established a zero-carbon business team, built a zero-carbon technology system, expanded the practical scope of green technology, and promoted the green and low-carbon transition of various industrial chains and regions.

Efforts are being made to manage the full product life cycle from design, manufacturing, and logistics to end-of-life recycling. The Company actively contributes to the development of photovoltaic module recycling technologies, continuously improving recovery rates. It promotes green electricity usage, accelerates technological reserves and energy storage facility deployment, and strives to build green factories and advance sustainable business practices.

We promote GHG emissions verification efforts, integrating climate change mitigation strategies into our business model. We identify climate risks and key response strategies, enhancing our capacity to address climate-related risks. By joining the Science Based Targets initiative (SBTi), we have set both short-term and long-term emission reduction targets and pathways.

With the release of the *JA Solar Biodiversity Policy*, the Company has committed to protecting biodiversity and preventing deforestation. We continue to explore and implement a range of initiatives that contribute to the improvement of the natural environment.

The Company maintains strict compliance standards and enforces a zero-tolerance policy for corruption. It upholds transparency and fairness through the implementation of the *JA Solar Whistleblower Protection and Integrity Reporting Policy* and ensures employee voices are heard through a variety of democratic communication channels.

The Company also actively collaborates with global partners, including the United Nations Global Compact (UNGC), the World Wide Fund for Nature (WWF), and the International New Energy Solution. Through joint projects and technical exchanges, it works hand in hand with partners to promote the achievement of sustainable development goals.



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TOPIC

1

Upholding Human Rights and Environmental Standards through a Responsible Supply Chain

Systematic Institutional Guarantees

100% of our core suppliers sign the *JA Solar Supplier Code of Conduct*

100%

We improved the "Supplier Sustainability Assessment" system, which includes 38 major topics and 160 indicators.

38 | 160

In 2024, we conducted over 200 supplier empowerment training sessions.

200

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FORGING A RESPONSIBLE SUPPLY CHAIN FOR SUSTAINABLE DEVELOPMENT

JA Solar firmly believes that sustainable development is an inevitable choice to drive lasting progress in human society. At its core, sustainability is about upholding the values of "putting people first" and "being environmentally responsible". We work hand in hand with partners from all sectors to foster a high-quality development model where humans and nature coexist harmoniously, and the upstream and downstream industrial chains progress together, promoting the deep integration of sustainability concepts into the industrial value chain.

JA Solar actively collaborates closely with business partners and suppliers and aims to manage human rights and environmental risks in the supply chain through comprehensive contractual obligations, rigorous due diligence management procedures, and continuous monitoring and evaluation.

The Company has established a comprehensive responsible supply chain management system that starts with policy formulation and risk identification, ensuring compliance in supply chain operations through a closed-loop management process. As a core policy document, the *JA Solar Supplier Code of Conduct* requires all suppliers to sign and strictly adhere to international labor standards and human rights guidelines, specifically covering core requirements such as the prohibition of child labor and forced labor, ensuring fair compensation, and guaranteeing reasonable working hours. It also clearly defines the boundaries of suppliers' responsibilities in environmental areas such as energy conservation and emission reduction, and control of specific substances. In addition, norms of business ethics such as prohibiting unfair competition and anti-corruption are also included in the management scope of supplier conduct.

JA Solar Supplier Code of Conduct details the responsibilities and obligations of suppliers in areas such as labor and human rights, health and safety, environmental responsibility, corporate governance, and business ethics.

JA Solar Responsible Sourcing Policy clarifies the requirements for suppliers during the procurement process and the content of responsible supply chain management, such as supply chain mapping, risk prioritization, on-site audits, corrective actions, and exit management.

JA Solar Conflict Minerals Management Policy specifies a responsible management procedure for conflict minerals for the strict control of the sources of mineral procurement to ensure the use of responsible mineral resources in the supply chain.

During the risk assessment phase, JA Solar conducts preliminary risk screening based on relevant risk indicators to establish a risk positioning benchmark, and performs a systematic assessment through the "Supplier Sustainability Assessment" system, evaluating multiple dimensions such as labor and human rights, occupational health and safety, environment, and management systems, ultimately completing dynamic grading management of supply chain risk levels.

For suppliers identified as high-risk, the Company requires them to develop corrective action plans. Where necessary, the Company will offer suggestions and support to ensure the plans clearly define the corrective measures, root causes, responsible parties, and implementation deadlines. To guarantee effective execution, the Company collaborates with third-party auditors to conduct on-site audits. Suppliers that fail the initial audit are subject to follow-up audits to strictly assess the outcomes of their corrective actions.

In cases of severe violations such as persistent environmental pollution without remediation or repeated major human rights infringements, the Company will conduct a comprehensive assessment and, in accordance with contractual terms, notify the supplier in advance of the decision to terminate the partnership. Once financial settlements and inventory matters are resolved, the supplier will be permanently blacklisted.

Each year, the Company maintains regular communication with suppliers and organizes capacity-building training through both online and offline sessions. By sharing real-life cases and practical experiences, the Company helps suppliers strengthen their compliance management. When necessary, we also provide on-site guidance and technical support to key suppliers.

Fostering an Equitable and Inclusive Workplace through Employees' Rights and Interests Protection

Actively Promoting Diversity, Equality, and Inclusion among Employees

JA Solar Invited the International SOS Pte. Ltd. for Training on Women's Health and Travel Safety

Enabling Shared Prosperity through Community Synergy Fostering

Regarding our employees, in accordance with the *JA Solar Human Rights Policy*, we are committed to creating a safe and healthy work environment. We fully respect employees' freedom of association and their right to collective bargaining, strictly prohibit all forms of discrimination, harassment, and bullying, and strive to provide fair working conditions and equal opportunities for growth and development.

Policy support: We actively foster an open, transparent, and democratic communication mechanism. Trade union have been established across our sites, and collective agreements such as the *Collective Agreement*, the *Collective Agreement for the Protection of the Rights and Interests of Female Employees*, and the *Collective Bargaining Agreement on Salaries* have been put in place. These agreements are updated annually to ensure that employees' rights and concerns are protected and addressed.

Empowerment training: We also offer mental health training programs specifically for female employees, with a focus on promoting both physical and mental well-being while enhancing overall employee development.

International initiative response: We signed the *Women's Empowerment Principles (WEPs)* of UN Women and promoted their implementation to ensure equal development rights and equal pay for female employees in the workplace, extending gender equality from internal governance to the industrial ecosystem.



At the community level, JA Solar fully respects the rights of local residents and the indigenous peoples, including the rights to maintain and strengthen their institutions, culture, and traditions, the right to freely pursue development, and the right to participate in decision-making processes that affect their lives. Meanwhile, we continuously focus on diverse community development actions such as overseas emergency rescue, medical care, and community development, while deeply assessing the Company's impact on the local natural environment and biodiversity, to maintain a beautiful community environment and ecology.

Stakeholder identification and assessment: We comprehensively identify stakeholders and communicate with them through various means.

Local Employment: JA Solar actively creates more job opportunities for local residents in its overseas expansion, supports localized procurement, and contributes to the economic and social development of the region.

Comprehensively advance the Every Corner Sustainable Development Project, implementing projects worldwide in educational empowerment, public welfare, disaster relief, community building, and related fields.



TOPIC

2



SEEKING GREEN VALUE FOR A BRIGHT FUTURE

"Visionaries will succeed, and travelers will arrive." As a "visionary" and "traveler" in response to global climate change, JA Solar closely aligns with international climate policies and action frameworks and works with stakeholders to transform green visions and actions into practical solutions toward energy transition. On the path of green transformation, we will build a more sustainable and low-carbon future in cooperation with global partners.

Visionaries

Green and Just Transition

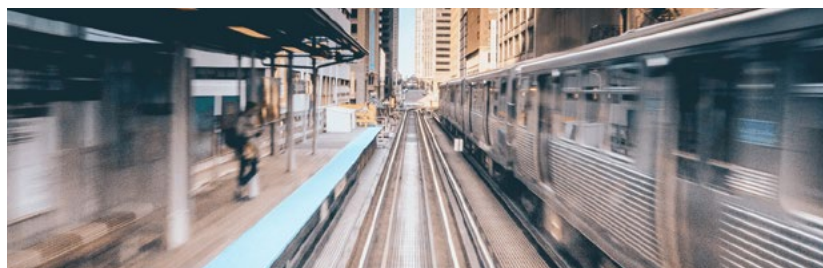


Ushering a Low-carbon Future with Foresight

JA Solar remains steadfast in its vision for green development. By actively participating in and promoting international sustainability initiatives, we are accelerating the global green transition and partnering with industry and value chain stakeholders to support the achievement of global climate goals.

Joined the "Forward Faster" Initiative of the UNGC

In March 2024, JA Solar officially pledged to join the "Forward Faster" Initiative launched by the UNGC, aiming to fast-track progress toward climate action and sustainable finance, among other sustainable development goals. We support the achievement of net-zero GHG emissions by placing a just transition at the core, ensuring that the implementation of deep decarbonization measures and adaptation strategies does not exacerbate social inequalities, thereby delivering both climate and social benefits.



Low Carbon Transition Goals



Gained Official Certification for Science-Based Targets Initiative (SBTi) Goals

To achieve a low-carbon transition, JA Solar has integrated carbon reduction targets into its corporate development strategy and joined the SBTi. In December 2024, JA Solar's SBTi targets were officially certified. We clarified the Company's short-term and long-term emission reduction pathways for 2034 and 2050 and provided a measurable and science-based industry benchmark to promote green and low-carbon transitions in the sector.


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Low Carbon Development Initiative

Launched the "Global Green and Low-carbon Industry and Commerce Development" Initiative

In 2024, JA Solar, together with 30 leading companies from key industries such as construction, industrial equipment, and finance, jointly launched the "Global Green and Low-carbon Industry and Commerce Development" Initiative. The initiative aims to promote widespread practices in low-carbon environmental awareness, energy conservation and emission reduction, circular economy, technological innovation, and green energy applications, and to accelerate the green transition process of the industry by integrating multiple resources and technological advantages, providing strong support for achieving future global climate goals.



Supporting Net Zero Goals

Joined China's "Green Electricity 100%" Initiative (GE100%)

To enhance the transparency of green electricity usage information disclosure, expand the pathways for green electricity consumption in end-user scenarios, and accelerate the process of full coverage of green electricity for enterprises, JA Solar joined China's GE100%. As one of the first supporting entities of this initiative, JA Solar actively builds a long-term development mechanism for renewable energy, accelerating the promotion of renewable energy use and fulfilling the commitment of the initiative through practical actions.



Travelers

Navigating Green Horizons with Footsteps

JA Solar always upholds its responsibility and commitment to global climate governance. As an action-oriented player in combating climate change, we actively implement multiple low-carbon initiatives and technological innovations, promoting global climate governance through industry-leading climate-related financial assessments, establishing zero-carbon factory pilots, and creating zero-carbon park solutions. We firmly believe that with pragmatic measures and innovative actions, we will provide more replicable solutions for the industry's low-carbon development and steadily advance on the path to a green future.



Boosting Climate Resilience

Unveiled the First TCFD Report at the United Nations News Studio

On November 18, 2024, JA Solar held a press conference for its first *Climate-related Disclosure Report and TCFD Report* at the COP29. Based on mainstream international climate scenarios, we conducted an in-depth quantitative analysis and comprehensively assessed the financial impacts of climate risks, laying the foundation for enhancing resilience in climate risk management.



Empowering a Low-carbon Ecosystem

Successfully Completed the "Climate Ambition Accelerator" Program

In 2024, JA Solar actively participated in the "Climate Ambition Accelerator" program initiated by the United Nations Global Compact (UNGC) and completed a six-month capacity-building program together with over 20 global companies. The Company has demonstrated high levels of participation and innovation in the three core modules of project infrastructure, business practices, and implementation promotion. Through learning in areas such as optimizing GHG emission inventories, setting science-based carbon targets, and managing carbon emissions, the company has enhanced low-carbon awareness and created a low-carbon atmosphere internally.



Building a Zero-carbon Factory

Obtained the TÜV Zero Carbon Factory Certification for Yangzhou Production Site

In 2024, the Yangzhou Production Site (Jingshan Park) received a four-star certification for a Zero-carbon Factory (Type I) from TÜV SÜD (China) Co., Ltd. based on the *Evaluation Specification of the Zero-carbon Factory*. It became the first zero-carbon factory in Yangzhou. During the assessment, the Yangzhou Production Site excelled in areas such as basic management, infrastructure, energy and carbon emission intelligent information systems, resource utilization, product design, GHG reduction, and carbon offsetting. Its total energy consumption and intensity were both better than national, industry, and local standards, fully showcasing JA Solar's proactive actions and leading practices in adapting to green transformation.



Low-carbon Park Model

Presenting the "JA Solar's Solution" for a Low-carbon Park with Multi-scenario Integration

In 2024, the low-carbon park project at JA Solar's Dongtai Production Site was completed, presenting the "JA Solar's Solution" for a low-carbon park with multi-scenario integration. As the Company's first multi-scenario BIPV digital low-carbon park, the project featured a zero-carbon digital management platform and adopted multi-scenario BAPV/BIPV, integrated photovoltaic storage and charging, water cooling system, and other low-carbon technologies. It can significantly reduce the park's energy consumption and GHG emissions and achieve efficient resource recycling. We explored a replicable low-carbon park construction model in areas such as green power production, energy management, and resource recycling, providing a benchmark case with demonstrative significance for the industry.

■ BAPV: Building-Applied Photovoltaics

■ BIPV: Building-Integrated Photovoltaics



FASTER FOSTER
FAIRER FURTHER

FASTER

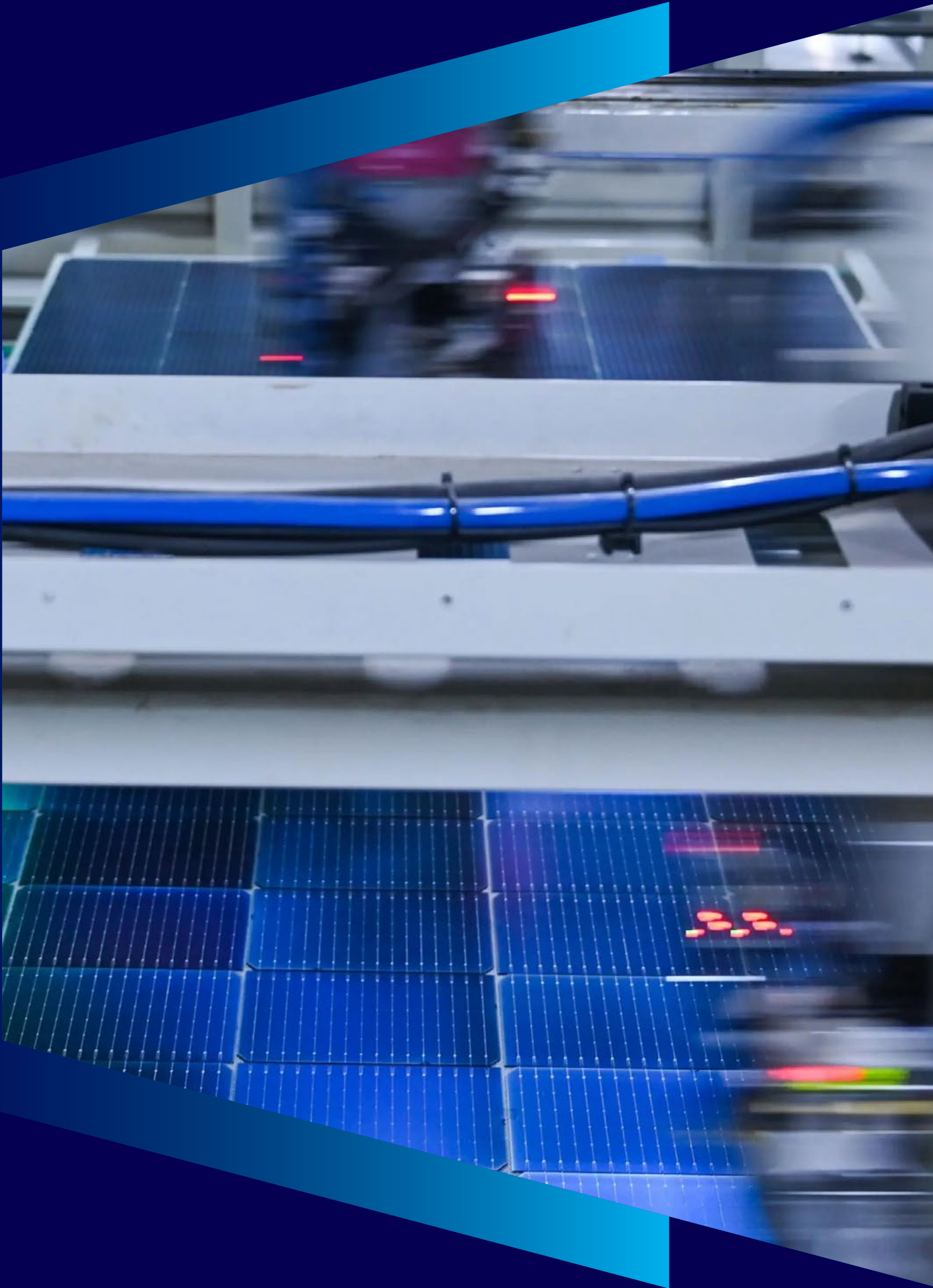
Product and Service Chapter

Collaboration for Sustainable Win-win Growth



As a leading photovoltaic solution provider, we continuously optimize product R&D and quality assurance, offering efficient and reliable green energy solutions. Advancing together with customers, suppliers, and industry partners, we drive technological progress and industry prosperity, accelerate the popularization of green energy with a collaborative and win-win approach, and create a vibrant and sustainable value ecosystem.

PRODUCT R&D INNOVATION	1.1
ENSURING OUTSTANDING QUALITY	1.2
CO-BUILDING A RESPONSIBLE SUPPLY CHAIN	1.3
TRACEABLE SUPPLY CHAIN	1.4



Product R&D Innovation

1.1

Innovation-driven Development

1.1.1

As of 31 December, 2024

Valid authorized patents obtained by JA Solar

1,899

Innovation is the core driver behind JA Solar's high-quality development. We continuously promote technological iteration and optimization of the R&D system by building an innovation ecosystem that coordinates internal and external efforts based on market demand. In the field of product R&D innovation, we consistently invest resources and collaborate with diverse stakeholders to drive breakthroughs and applications in photovoltaic technology, providing intelligent and green solutions to meet diverse market needs and co-create a sustainable future.

JA Solar consistently implements the R&D strategy of "one generation for production, one generation under R&D, and one generation for reservation". We establish a vertically integrated technical R&D system for the whole photovoltaic industry chain and dynamically optimize the R&D system based on internal and external demand, enhancing technological innovation capabilities and market response efficiency while maintaining a globally leading R&D system and product technology advantages. Currently, our R&D system covers the whole value chain, including R&D and the conversion of results, with ongoing investments in R&D and talent acquisition. Through continuous technological innovation and product development, we provide customers with more economical and environmentally friendly products and solutions.

In 2024, JA Solar's R&D investment reached RMB 3.711 billion, accounting for approximately 5.29 % of the Company's total revenue. As of December 31, 2024, JA Solar has a total of 1,899 valid authorized patents, including 1,031 invention patents, with overseas patent applications covering multiple countries and regions such as Europe, the United States, Japan, South Korea, Malaysia, and India.

In addition, to continuously expand the depth and breadth of the Company's R&D innovation, JA Solar actively establishes close cooperative relationships with many well-known research institutions, universities, senior scholars, and internationally renowned enterprises, as well as third-party and ecological partners, sharing industry experience and technical resources to jointly introduce and develop cutting-edge technologies. In 2024, JA Solar set and achieved an innovative management goal to promote at least two R&D collaborations with external business partners, which have already been implemented.

Indicator	Unit	2022	2023	2024
Total revenue from clean technology products and services	RMB 100 million	729.89	815.56	701.21
Revenue from clean technology products and services as a percentage of total revenue	%	100%	100%	100%
R&D investment	RMB 100 million	46.08	44.46	37.11
Percentage of R&D investment in annual revenue	%	6.31%	5.45%	5.29%

JA Solar and the University of New South Wales Jointly Established a Laboratory and Signed the First Batch of R&D Projects

CASE

In 2024, JA Solar established a laboratory in collaboration with the University of New South Wales. Both parties will leverage the University of New South Wales' leading photovoltaic research resources for in-depth technical exchanges and cooperation in various areas such as photovoltaic cells, module technology, new materials, and carbon reduction technologies, strengthening resource and advantage complementarity to jointly drive technological progress and the transformation of research achievements in the photovoltaic industry.



Technological Innovation Achievements

1.1.2

JA Solar continues to increase product performance, expand diverse technological pathways, and comprehensively advance high-efficiency solar cells, new material R&D, and energy storage technologies. We endeavor to improve photovoltaic power generation efficiency, lower costs, and optimize product performance while delivering industry-leading low-carbon photovoltaic power solutions worldwide. By continuously providing higher-quality products and services, we aim to create greater ecological value for the market.



Silicon Wafer Innovation

- We successfully implemented the low-oxygen 6.0 technology for n-type monocrystalline silicon, significantly reducing the oxygen content in silicon crystals. This enables higher photovoltaic cell conversion efficiency and further enhances the long-term stability and reliability of the cells.



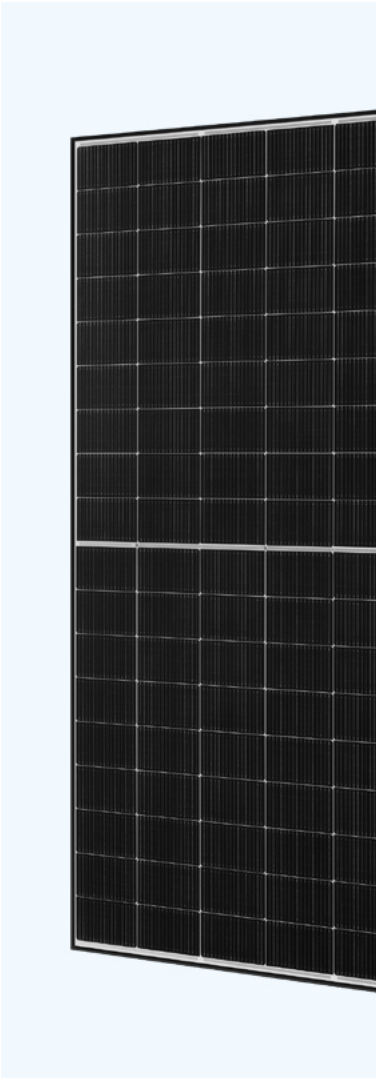
Cell Innovation

- We have developed stacked Poly technology, effectively improving both cell efficiency and yield.
- We proposed technological solutions to replace silver with base metals such as aluminum and copper in conductive pastes, offering the potential to substantially reduce production costs.



Module Products

- We are pursuing all-scenario product design, developing targeted module solutions for diverse environments such as offshore, desert, and plateau regions.
- We continue to promote the application of new technologies, launching high-efficiency 0 busbar (0BB) modules and single-glass anti-dust-accumulation modules based on Bycium+ cell technology.



0 Busbar (0BB) High-efficiency Module

Based on n-type Bycium+ cell technology, JA Solar has independently developed the 0BB high-efficiency module. Featuring a busbar-free design, this module minimizes ribbon shading and maximizes light absorption area, effectively reducing internal resistance and current transmission loss. With a conversion efficiency exceeding 23.5%, it achieves breakthroughs in both power output and efficiency.

Dust-resistant Module

JA Solar has developed an anti-dust accumulation module specifically designed for rooftop applications. Leveraging proprietary anti-dust and frame design patents, the module demonstrates excellent structural stability in environments with windblown sand and rainfall. Its optimized front-side design ensures enhanced load-bearing capacity and overall reliability. Empirical data shows that, with the anti-dust design, the module's average power generation per watt is 6.13% higher than that of conventional modules. In extended dry conditions, where dust continues to accumulate, the power generation gain of the anti-dust module can exceed 15.75% compared to standard modules.

TOPCon Cell Products

We continue to make breakthroughs in photovoltaic cell technology, with our TOPCon cell products receiving efficiency certifications from multiple authoritative organizations in 2024.

In June 2024, JA Solar topped the authoritative list of Solar Cell Efficiency Record Table in the "Large-size TOPCon Cell Efficiency Category" with its 330cm² TOPCon cell, setting a new world record. Meanwhile, this cell is the largest size currently in the silicon-based cell record and is one of the mainstream mass-produced cell sizes under JA Solar.

In August 2024, the China Renewable Energy Society PV Committee (CPVS) held the "2024 Certification Ceremony of China's Highest Efficiency of Solar Cells" at the 19th China Renewable Energy Congress. The efficiency results of the mass-produced size TOPCon cell submitted by JA Solar were selected for the "2024 China's Highest Efficiency of Solar Cells" list, ranking first in the n-TOPCon category.

In November 2024, the globally recognized testing authority, Germany's Institute for Solar Energy Research in Hamelin (ISFH), issued a test report confirming that JA Solar's cell achieved an open-circuit voltage (Voc) of 748.6 mV, setting a new record in the commercial TOPCon cell sector. This result surpasses the open-circuit voltage of the current world-record back-contact (BC) cell and reaches the passivation level of heterojunction (HJT) cells. ¹

¹ HJT: Hetero-junction with Intrinsic Thin-film.

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Ministry of Industry and Information Technology	National Technological Innovation Demonstration Enterprise
	National Manufacturing Single Champion Enterprise
	Second Prize of BRICS Industrial Innovation Contest 2024
Industry Development and Promotion Center of the Ministry of Industry and Information Technology	Second Prize in the Solar Photovoltaic Track at the Second Energy Electronics Industry Innovation Competition
	Golden Award in the Grand Final at the Second Energy Electronics Industry Innovation Competition
National Energy Administration	International Energy Cooperation Best Practice
PV Evolution Labs (PVEL)	Top Performer in PVEL for the Ninth Consecutive Year
Renewable Energy Testing Center	Highest Achiever by Renewable Energy Testing Center (RETC)
TÜV Rheinland	2024 "AQM" TOPCon Bifacial Module Outdoor Power Generation Excellence Award
PV magazine	Five-Star "VERY GOOD" Rating

Green Solutions

1.1.3

JA Solar always embeds the concept of green and low-carbon development throughout the whole product lifecycle. Driven by technological innovation, we are dedicated to green practices from multiple dimensions, including innovative R&D, manufacturing production, low-carbon products, and comprehensive solutions for efficient and clean solutions for global energy transition.

Green Technology

Crystal-Pulling Technology

JA Solar actively explores green technology. We make ongoing efforts to drive technological innovation through AI intelligent crystal pulling, low-temperature interconnection, and other technologies, providing strong technical support for the construction of green products.

In the crystal-pulling technology sector, JA Solar continuously innovates by developing AI-enhanced crystal pulling furnaces, introducing new thermal field designs applying advanced materials, and successfully achieving a significant power reduction growing process. On this basis, JA Solar further developed its unique crystal-pulling technology, which combined multiple advanced processes to further reduce the power of pulling furnaces and decreased energy consumption per unit output, as well as promote green manufacturing.

Module Technology

In the module technology sector, JA Solar actively participates in national key R&D programs, completing the development of low-temperature interconnection technology at the module end to reduce potential thermal damage caused by traditional high-temperature welding processes and improve the long-term module reliability. Meanwhile, we have adopted new technologies such as thinner encapsulant films, reduced-weight ribbons, and non-aluminum frames, initially achieving the design and development of high-efficiency, low-consumption cell module products with optimized raw and auxiliary materials.

Green Manufacturing

JA Solar highly values collaborative cooperation across the whole industry chain, striving to build a resource-efficient and environmentally friendly business model during the manufacturing production phase. To reduce peak electricity consumption, the Company has implemented an optimization system for electricity usage during peak and valley times, scheduling workshop machine maintenance during peak times and ramping up temperature during valley times, effectively reducing production costs and unnecessary energy consumption. In addition, we actively promote the deep integration of digitalization and energy management in our production sites, optimize factory equipment and facilities, continuously improve the green manufacturing system, while increasing the use of green electricity, accelerating the layout of medium- and long-term technology reserves and energy storage facilities, and are devoted to building green factories and promoting the comprehensive development of green operations.

Green Products

The Company places great importance on the environmental impact of its products, comprehensively reducing carbon footprints through utilizing green energy, building green supply chains, green product design and intellegent manufacturing, and conducting green recycling. The Company embeds ecological concepts from the design stage, reduces environmental burdens through material innovation and process optimization, and has established a dedicated carbon footprint management team in the R&D department.

Guided by the concept of green design and in pace with international market trends, we are committed to providing products that meet green certification requirements. We build a green product matrix around silver-free technology, low-carbon modules, and energy storage systems, and actively adopt green auxiliary materials such as lead-free solder ribbons, fluorine-free backsheet, alcohol-free silicone, and low-acid encapsulants to effectively reduce the carbon footprint of our products.



Carbon Footprint Certification

Effective tracking and recording of carbon emission data is an important foundation for establishing science-based carbon targets, optimizing emission reduction strategies, and achieving carbon neutrality goals in the future, providing data support and decision-making basis for the Company's green transformation and sustainable development. JA Solar actively promotes the calculation and assessment of product carbon footprints by introducing third-party certification and platform management, strictly monitoring the carbon emissions throughout the whole lifecycle of products from production to recycling. As of now, all of the Company's mainstream products have passed the carbon footprint certification by Certisolis in France. In 2024, JA Solar continued to explore, improve, and innovate processes across the whole industry chain from crystal pulling, silicon wafers, and cells, to modules, implementing multiple measures to reduce carbon emissions during the manufacturing process, ultimately achieving outstanding results where the carbon value of mainstream n-type products can reach below 400 kgCO₂e/kW.

JA Solar Released the First Product Carbon Footprint Report for the "Initial Application Accounting Platform"

CASE

In 2024, the China Electronics Standardization Institute released the "Basic Database and Accounting Platform for Carbon Footprints of Photovoltaic Industry Products", providing data support for the industry's low-carbon transition. As one of the first companies to access this platform, JA Solar took the lead in quantifying the carbon footprint of its products throughout their whole lifecycle and was awarded the industry's first product carbon footprint certification certificate from the platform, demonstrating its authority and international recognition in product carbon footprint management.



Green Product Certification

JA Solar has always focused on the environmental performance of the product lifecycle and actively sought relevant authoritative international certifications to reduce the potential environmental impact of its products. In 2024, JA Solar's n-type products successfully obtained Norway and Italy Environmental Product Declaration (EPD) certification owing to their high efficiency and low environmental impact, effectively providing green-certified products for both domestic and international markets. Moreover, during the reporting period, JA Solar's n-type photovoltaic products successfully passed the Product Environmental Profile Ecopasport audit, promoted jointly by the French Environment and Energy Management Agency (ADEME) and the French Standardization Organization (AFNOR). By obtaining this Ecopasport, consumers can gain clearer insights into the environmental data of JA Solar products through the passport platform, enabling them to make more environmentally friendly purchasing decisions.



epd



Green Solutions

As of now

The scale of JA Solar's self-owned power stations has reached

3,700 MW

with an annual power generation of over

3.7 billion kWh

JA Solar fully considers the environmental requirements of different application scenarios and actively explores and provides customized, integrated green intelligent solutions for various application contexts. To meet the diverse needs of customers, the Company has established a zero-carbon business team, built a zero-carbon technology system, and achieved innovative applications in various scenarios such as offshore photovoltaics, low-carbon parks, and photovoltaic sand control. This further expands the practical scope of green technology, promotes the green and low-carbon transition of various industrial chains and regions, and allows more areas and people to enjoy green renewable energy. Meanwhile, for example, near airports, due to high requirements for light reflection, the Company has developed corresponding anti-glare modules to reduce light pollution's impact on airport operations and the surrounding environment. For water-based power stations, considering the importance of water quality protection, lead-free solder strips are used to avoid lead contamination of water sources and protect the aquatic ecological environment. We have developed and designed new products such as anti-dirt frames to reduce the frequency of cleaning during module maintenance, thereby lowering resource consumption.

As of December 31, 2024, our sales and service network covers 178 countries and regions. The scale of JA Solar's self-owned power stations has reached 3,700 MW, with an annual power generation of over 3.7 billion kWh. In addition, JA Solar facilitates PV grid connection at a fair price in line with development trends, enabling both green development and social benefits.

Distributed Photovoltaic Projects Assisted Regions in Addressing Climate Change

CASE

Average annual power generation

66 million kWh

The 51 MW rooftop distributed photovoltaic project at the Baotou Production Site is an important part of the National Energy Administration's photovoltaic pilot project in the Qingshan District of Baotou City and serves as a model practice for using renewable energy solutions to promote green energy and address climate change. The project is now fully operational, with an average annual generated power of approximately 66 million kWh, saving about 80 million tce each year, reducing carbon emissions by about 36,000 tonnes, and saving approximately RMB 21.1 million in electricity costs annually. It is estimated that the project will generate 1.65 billion kWh of green electricity over its whole lifecycle, saving 200,000 tce and RMB 560 million in electricity costs. The project is being efficiently advanced, with some sections taking only 68 days from construction to grid connection. JA Solar has completed a grid-connected capacity of 51 MW, accounting for 64.31% of the total capacity in the area, becoming the core force in promoting the whole region and providing constructive solutions for regional green energy promotion and climate change response.

JA Solar Launched Offshore Photovoltaic Solutions

CASE

In January 2024, JA Solar launched the DeepBlue 4.0 Pro SkyBlue Series and the OceanBlue Series, two offshore photovoltaic n-type product solutions, to help the industry tackle the challenges of offshore applications. The two products inherit the characteristics of DeepBlue 4.0 Pro, which include "high power, high efficiency, high generation, and high reliability", while adding advantages such as "salt mist resistance, UV resistance, damp heat resistance, and hot spot resistance", ensuring investment returns for offshore photovoltaic power stations and providing efficient and reliable solutions for offshore photovoltaics. Among them, SkyBlue Series is suitable for tidal flat sites with water depths of less than 10 meters or within 500 meters from the coast, using pile foundation installation, and features high water resistance, UV resistance, corrosion resistance, and high volume resistivity. OceanBlue Series is suitable for offshore areas with water depths greater than 10 meters, and floating installation is adopted. It features low carbon, lightweight, and higher reliability to ensure long-term stable operation. The combination of SkyBlue Series and OceanBlue Series comprehensively covers offshore photovoltaic application scenarios, meets diverse needs, and further consolidates JA Solar's technological leadership in the industry.



Photovoltaic Solution for Agricultural Irrigation System

CASE

In 2024, JA Solar launched a "Photovoltaic + Agricultural Irrigation" demonstration project in Brazil, promoting the local agricultural green transformation through customized photovoltaic solutions. The project deploys efficient photovoltaic modules in Brazil's agricultural regions to provide clean energy for irrigation systems, replacing traditional high-carbon equipment such as diesel generators. In response to the characteristics of strong sunlight and intermittent irrigation needs in tropical regions, the system uses high-power, high-efficiency photovoltaic modules to ensure the stable operation of irrigation equipment. This practice not only reduces agricultural production's dependence on fossil energy but also creates a replicable green solution for agricultural irrigation systems, aiding in the low-carbon transition of agriculture.

Exploring Innovative Solutions for "PV-enabled Desertification Control"

CASE

Most member countries of the BRICS are troubled by land desertification. PV-enabled desertification control, as an emerging technology, can achieve both environmental improvement and economic benefits, but it also places higher demands on photovoltaic module products. In September 2024, JA Solar's "High-performance Desert Modules Supporting PV-enabled Desertification Control" project stood out among all leading photovoltaic companies, winning the Second Prize in the BRICS Industrial Innovation Contest and being included in the "BRICS Industrial Innovation Cooperation Project Database". To this end, JA Solar proposed targeted product solutions for desert scenarios by optimizing cell technology, selecting packaging materials, and designing module systems.

Low-Carbon Campus Construction Solutions

CASE

To reduce the impact on the environment, JA Solar has integrated the concept of green low-carbon into the operational philosophy of Xingtai Polytechnic Institute of New Energy. The campus has created multiple photovoltaic BIPV systems, including curtain walls, corridors, and carports, and through a smart energy management platform, integrates photovoltaic and renewable energy heating and cooling supply, achieving "integrated wind, solar, storage, and charging" in the training building, enabling integrated control of energy such as "electricity, cooling, heating, water, and gas", and implementing dynamic optimization across all stages of energy production, storage, distribution, and consumption. Meanwhile, the combined heating and cooling system using soil-source heat pumps and air-source heat pumps has a renewable energy share of over 80%. JA Solar helps achieve a safe, low-carbon energy supply, flexible smart energy storage, and green, efficient energy use on campus, providing a standard model for building low-carbon campuses.

Creating a Green Demonstration Factory in Partnership with Liby

CASE

Regarding the green demonstration factory construction project of Xinxiang Liby Industrial Co., Ltd., JA Solar has engaged in strategic cooperation with Liby Group. Currently, the first phase of the rooftop distributed photovoltaic project has been completed and put into operation. The project exclusively uses JA Solar's module products, with integrated services from planning to operation and maintenance provided by JA Solar's Intelligent Energy.

In light of the characteristics of the color steel tile roof at the Xinxiang Liby factory, the technical team adopted a photovoltaic flat installation scheme and employed specialized integrated clamps to securely install the modules, achieving a comprehensive balance between photovoltaic power generation, roof reliability, and shading insulation. After the project commenced operation, it reduced internal energy consumption within the factory, simultaneously improved the working environment, and effectively alleviated the pressure of peak electricity demand in summer, becoming a model project for the integration of the "photovoltaics + manufacturing industry". Under the "self-generated power for self-use and surplus electricity connected to the grid" model, the project is expected to generate an average annual electricity output of approximately 3.889 million kWh, with a total output of about 97.2241 million kWh over 25 years, corresponding to an estimated savings of about RMB 31.48 million in electricity costs for the factory. It can reduce carbon dioxide emissions by 52,000 tonnes and sulfur dioxide emissions by 0.52 tonnes annually, demonstrating significant cost reduction and emission reduction effects.

Expected average annual power generation

3.9 million kWh

Annual carbon dioxide emissions reduction

52,000 tonnes



Empowering Digital and Intelligent Manufacturing

1.1.4

JA Solar uses new quality productive force as an engine to accelerate high-quality development and industrial upgrading. We deeply integrate digital and intelligent transformation and continuously apply advanced technology to empower the construction of module production sites and build a globally competitive intelligent manufacturing system.

Leveraging the Company's profound experience of intelligent manufacturing in the fields of silicon wafers, cells, and modules, we further reshape our production model. By deeply integrating cutting-edge technologies such as 5G and AI, the Company is gradually building a fully connected high-speed digital factory and fully implementing the China Manufacturing Maturity Model (CMMM) system, significantly enhancing production efficiency and achieving intelligent upgrades across the whole production process. Meanwhile, JA Solar organically combines digitalization with energy management, greatly improving automation levels, green manufacturing capabilities, and energy consumption control efficiency.

Name of Production Site	Honor Name
Hefei Production Site	Selected for the Ministry of Industry and Information Technology's 2024 5G Factory Directory
Shijiazhuang Production Site	Awarded the Provincial-level Title of "Advanced Intelligent Factory"
Dongtai Production Site	Selected for the "Jiangsu Province Industrial Internet Platform" Selected as a "Four-Star Cloud Enterprise and Industrial Information Security Protection Star Enterprise" by the Jiangsu Provincial Department of Industry and Information Technology
Qujing Production Site	Selected as a 2024 "Digital and Intelligent Factory" Demonstration Project by the Yunnan Provincial Department of Industry and Information Technology

The First in the Industry - Yangzhou Production Site Achieved Level 3 Certification through the "CMMM Intelligent Manufacturing Maturity Assessment"

CASE



In 2024, the Yangzhou Production Site, with its leading intelligent manufacturing facilities and systems, successfully applied for and passed the Level 3 Certification through the "CMMM Intelligent Manufacturing Maturity Assessment", becoming the first photovoltaic company to obtain this certification. The Yangzhou Production Site has achieved full-process digital management by linking intelligent systems such as the automated warehouse with the Manufacturing Execution System (MES) and the Warehouse Management System (WMS).



Shijiazhuang Production Site Was Awarded the Provincial-level "Advanced Intelligent Factory" Honor

CASE

The Shijiazhuang Production Site is comprehensively deriving digital transformation and upgrading. Centering on the CMMM Intelligent Manufacturing Capability Maturity Assessment, and implementing MES and Equipment Automation Project (EAP) systems, it has streamlined the information and data flow across all stages of silicon wafer and cell production, integrating AI visual recognition data to achieve comprehensive interconnection and collaborative sharing of equipment, data, and software/hardware, ensuring quality tracking and traceability throughout the process. In 2024, the Shijiazhuang Production Site successfully won the provincial-level honor of "Advanced Intelligent Factory", marking a milestone achievement in digital transformation.



Ensuring Outstanding Quality

1.2

Stable and reliable quality management is an important foundation for the Company's long-term development. JA Solar actively builds a comprehensive quality management system, optimizes quality management, continuously enhances customer service experience, and ensures that every link from R&D to delivery meets excellent standards, providing customers with trustworthy green energy solutions.

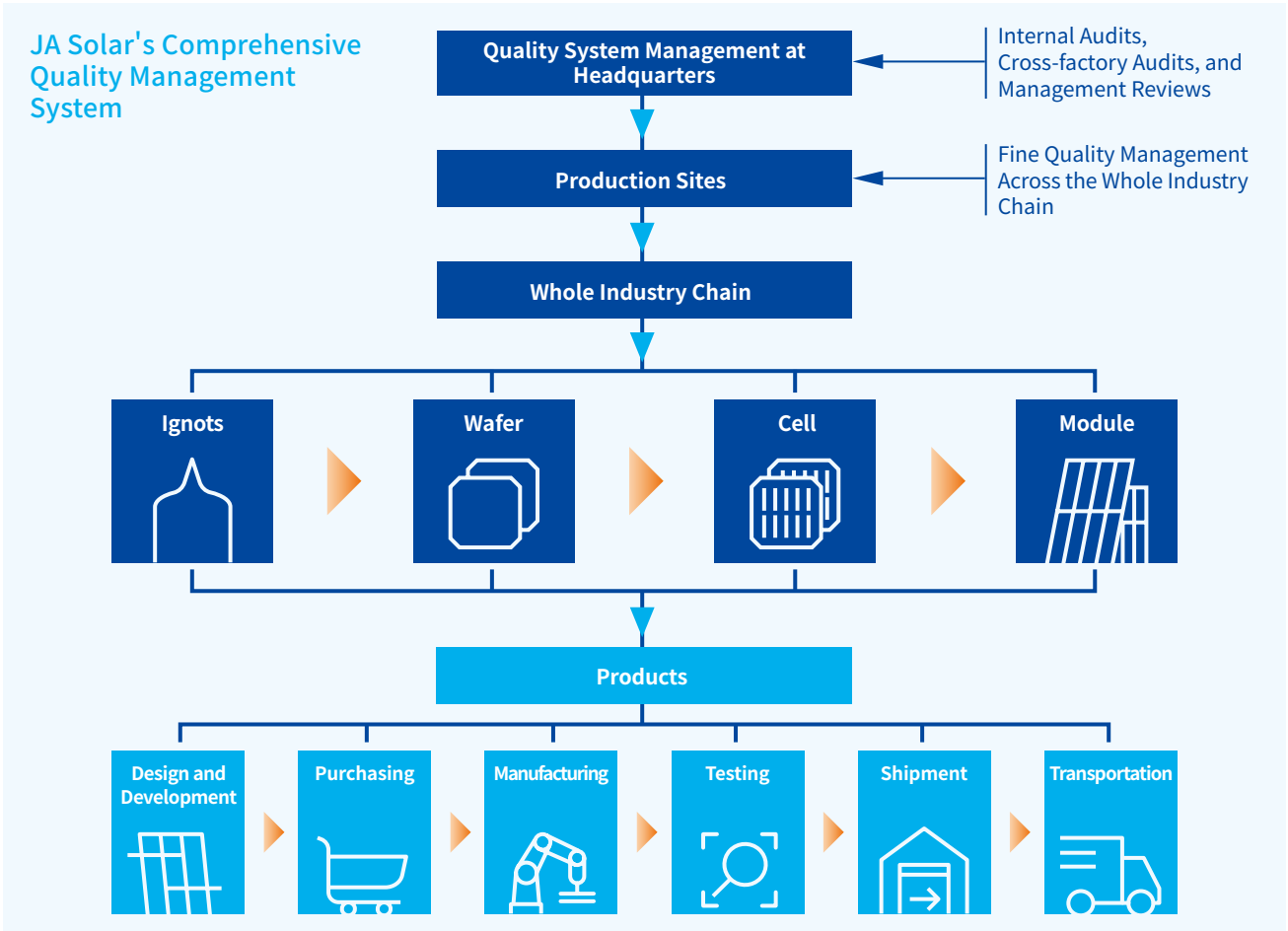
Optimizing Quality Management

1.2.1

Adhering to the product quality management concepts of "Ensuring Quality, Achieving Excellence, Perfecting Details, Creating Value", guided by customer needs and underpinned by a robust quality management framework and system, we have established a comprehensive quality management system that spans the whole industry chain and product lifecycle from product design, raw material control, and production process inspection, to finished product quality control and after-sales service. We are committed to continuously providing customers with high-quality, reliable, and responsible products.

During the product manufacturing process, JA Solar strictly complies with relevant laws and regulations such as the *Product Quality Law of the People's Republic of China* and the *Standardization Law of the People's Republic of China*, and establishes a comprehensive and efficient quality management structure in accordance with the standards of the ISO 9001 quality management system, ensuring that every link strictly meets quality control standards. The Company has established a clear product quality supervision system, and clearly defined the quality responsibilities and authorities at all levels, laying a solid management foundation for building a high-quality ecological system.

Meanwhile, to ensure the effective implementation of quality management at critical production nodes, the Company has established several internal systems, including the *Quality/Environmental/Occupational Health and Safety Management Manual*, *Headquarters Document Control Procedure*, *Management Review Procedure*, *Identification*, and *Traceability Management Procedure*, and *Product Protection and Delivery Management Procedure*, standardizing and regulating processes to ensure effective quality management and strictly controlling every detail of quality management in the production process.



Full-lifecycle Quality Management

JA Solar continuously promotes the refinement and systematization of quality management. In 2024, JA Solar established a new full lifecycle quality management model that covers the whole lifecycle of products or services, including planning, design, manufacturing, delivery, use, and maintenance.

This management model is based on the Plan-Do-Check-Act (PDCA) management framework, aiming to ensure continuous monitoring and management of the quality of products or services throughout their whole lifecycle, and to promptly identify and resolve potential quality risks and issues through corresponding feedback mechanisms, ensuring the delivery of high-quality products and services, continuously enhancing customer satisfaction, and further sharpening the Company's core competitive edge.

Raw Material Procurement

In the raw material procurement phase, JA Solar implements strict audits and evaluations of suppliers and supplied materials to ensure the long-term stability of raw material quality, prioritizing materials that meet environmental protection and safety standards. By controlling product quality from the source, the Company builds a solid quality barrier, laying the foundation for the continuous provision of high-quality products.

Production Operations

In actual production operations, JA Solar adopts multiple measures to strictly control several important production nodes, continuously optimizing quality management processes and management measures. For the research and design phase, the Company has established a comprehensive product feasibility assessment system, focusing on a thorough evaluation of product design, material selection, and production process reliability to ensure that product quality and safety meet the highest standards.

Product Testing

During the product testing phase, JA Solar establishes strict testing standards to ensure that modules pass rigorous tests conducted by internationally recognized authorities, demonstrating excellent performance in product quality, reliability, and power generation. In addition to meeting national testing certifications and market access requirements in key operating regions, the Company adopts even stricter testing standards during the product design and development process to ensure product performance and safety under extreme conditions such as potential induced degradation (PID), salt spray, ammonia, sand and dust, mechanical load, and packaging and transportation. Meanwhile, the Company conducts a comprehensive assessment of the potential environmental and social impacts during the product's usage, ensuring that the product meets sustainability requirements throughout its whole lifecycle.

To date, JA Solar has conducted environmental and social impact assessments on 18 product categories, accounting for 86% of all products.

86%

Key Performance

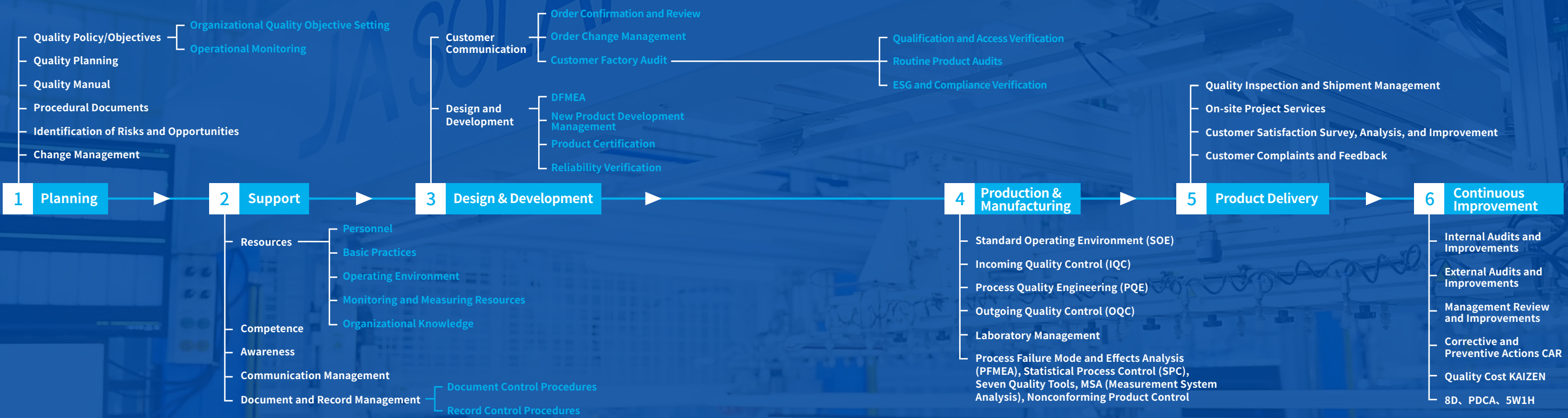
Goal: JA Solar's Outgoing Quality Rate (OOR) reaches 100%, with zero major quality and safety incidents.
2024 Action: All goals have been achieved.

100%

JA Solar has obtained ISO 9001 quality management system certification and IEC 62941 photovoltaic module manufacturing quality management system certification. Its main products have passed product safety certifications in multiple countries and regions, such as EU CE, North America ETL(NA ETL), UK MCS, Germany TÜV, Australia CEC, India BIS, and South Korea KS.



Full-lifecycle Quality Management – Operation Model



Fostering a Quality Culture

1.2.2

JA Solar is committed to creating a quality management culture that involves everyone, advocating for employees to integrate quality awareness into every aspect of their daily work. We actively carry out various activities such as Quality Management Month, quality meetings, specialized training, and excellent team evaluations to continuously improve product quality, identify problems, solve issues, and comprehensively ensure product quality and safety, promoting the Company's high-quality development.

JA Solar's Quality Month Empowerment Training

CASE

To create a positive atmosphere of "valuing customer needs, guaranteeing quality among all, and pursuing excellence in quality", JA Solar held a Quality Month empowerment event in September 2024. During the event, we conducted training on quality system management knowledge, introduced quality management tools, and discussed ideas and methods for solving quality issues. Meanwhile, the Company popularized quality knowledge through online classes, exhibited defect catalogs, conducted internal audits, internal training, and external communication and learning, comprehensively raising the quality awareness of all employees and enhancing the overall quality management level.



Major Honors

JA Solar always adheres to the principles of continuous improvement and innovation. With an excellent quality management system and advanced technological capabilities, the Company continuously earns recognition in the industry and has received numerous awards and honors.

Awarded by	Honor
China Testing & Certification International Group Co., Ltd.	Best Quality Award for Outdoor Empirical Evidence
	Outstanding Performance Award in Extreme Cold
	Gold Award for "Excellent Quality Control Laboratory"
China General Certification Center	Level A+ in Leader + Cold Climate Empirical Assessment Certificate
China Machinery Industry Federation	Silver Award in the "Hangyang Cup" Third National Machinery Industry Product Quality Innovation Competition

Strengthening Product Responsibility

1.2.3

JA Solar values the management of non-conforming products and strictly controls the product recall process. In response to potential product quality and safety risk issues, the Company has established internal management systems such as the *Product Recall Handling Process*, *Non-conforming Product Control Procedure*, *Major Quality Abnormality Handling Mechanism*, and *Continuous Improvement Management Procedure* to ensure that the Company can respond promptly and take effective measures to recall non-conforming products when faced with recall events triggered by quality abnormalities, thereby minimizing customer losses and protecting customer rights.



During the reporting period, JA Solar had no product risk incidents, with 0 product recalls.

0

Providing Quality Services

1.2.4

Since its inception, JA Solar has adhered to the service principle of "Putting Customers First, Continuously Meeting Their Demands", and provided high-quality services to every customer. We follow the service philosophy of "Customer-centric" and the business philosophy of "Born to Create Values for Customers", continuously improving services and using customer satisfaction as our action guideline to enhance the global customer service network.

We have established a standardized and regulated customer service assurance system to ensure active responses at every stage related to customers before, during, and after sales, providing a comprehensive high-quality service experience. The Company has developed internal documents such as the *JA Solar Module Complaint Feedback Handling Process*, *Customer Complaint Quality Target Management Procedure*, *Customer Satisfaction Survey Procedure*, *Power Station Visit Service Process*, and *Product Recall Handling Process*. During the reporting period, we optimized and updated the after-sales on-site service documents, including the *On-site Service Management Measures for Projects*, *On-site Service Reward and Punishment Management System*, *On-site Service Project Vehicle Management System*, and *On-site Service Process*. Meanwhile, JA Solar actively developed a new customer complaint system, allowing customers to directly submit complaints and follow up on the progress of complaint handling, optimizing the interaction experience and continuously enhancing customer trust and satisfaction.

In addition, JA Solar is actively improving responsible marketing management by establishing a responsible marketing review mechanism to ensure that all promotional materials comply with legal and regulatory requirements. We actively update marketing materials, striving to use more environmentally friendly materials without changing costs.

In 2024, the number of incidents of marketing violations

0

Coverage of ESG training for sales personnel

100%



JA Solar Conducted Responsible Marketing and ESG-themed Training for All Sales Personnel

CASE

In 2024, to comprehensively raise the sustainability consciousness of sales personnel, JA Solar also conducted responsible marketing and ESG-themed training for all sales employees, requiring full participation and setting post-training assessments to ensure adherence to sustainability principles in marketing activities, promoting products and services in an honest, transparent, and fair manner, and providing customers with a higher quality service experience.



Global Customer Service System

In 2024, JA Solar provided a total of 182 on-site services

182

Identifying and correcting 1,510 anomalies during inspections

1,510

In 2024, JA Solar conducted a total of 213 power station tests

213

After-sales Service Mechanism

Pre-sales Service

The Company has built a professional sales team with rich experience and excellent skills. We are dedicated to providing customers with comprehensive product information, customized solutions, and efficient service support. By deeply understanding customer needs, the team can accurately match products and services, helping customers achieve customized business goals and creating diverse value for them.

During-sales Service

During the module supply process, the Company always prioritizes customer needs, providing comprehensive sales support. We arrange for engineers to be on-site to provide professional technical support to customers, including comprehensive technical training and project inspections. In 2024, the Company conducted 182 on-site services to power stations, identifying and correcting 1,510 anomalies during inspections, helping customers avoid risks, and providing more stable, high-quality services.

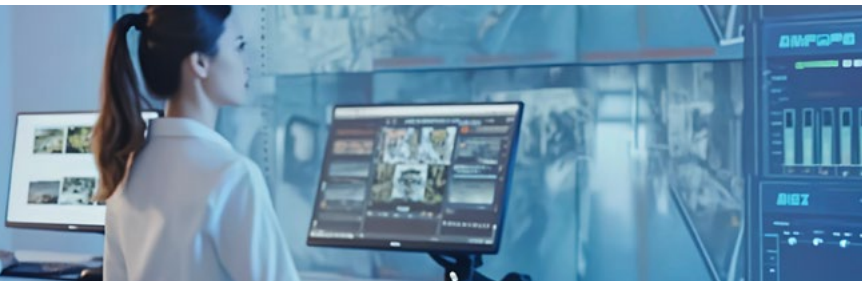
Meanwhile, the Company conducts factory audits for customers, covering areas such as quality management systems, occupational health and safety management systems, and social responsibility, and provides power station testing services. To address potential safety risks during on-site operations, we conduct detailed safety briefings and communications to ensure the safety and efficiency of the work. In 2024, the Company conducted a total of 213 power station tests for customers, including 129 third-party tests, with JA Solar leading 64 tests and assisting in 65 tests, while JA Solar independently conducted 84 tests. Through meticulous services, we effectively manage risks, helping customers enhance operational stability and ensure the long-term smooth operation of power stations.

After-sales Service

For after-sales service, the Company has established a professional customer service team through rigorous training and selection and has implemented a "24-hour response mechanism" for customer feedback to efficiently address customer needs. Upon receiving customer feedback, we promise to contact the customer within 24 hours to understand the issue in detail and provide an urgent solution. Meanwhile, the issue will be immediately forwarded to the relevant department, where a specially formed investigation team will complete the cause analysis, clarify responsibility for routine cases within 10 working days, and ensure that solutions for major cases are submitted to the customer within 30 days. This process aims to quickly respond to customer needs and ensure efficient resolution of issues through a systematic investigation and handling mechanism, thereby enhancing customer satisfaction. In 2024, JA Solar implemented a "customer complaint feedback tiered response mechanism" to manage processing timeliness based on the number of abnormal modules reported by customers, clearly defining processing timeframes to ensure efficient responses and problem resolution, thereby improving customer satisfaction. Additionally, the Company has optimized the complaint system through digitalization, allowing customers to submit requests in real-time and track processing progress, significantly enhancing service response efficiency and trust through transparent two-way communication, providing sustainable value assurance for global customers.

Internal: Establishment of a Dedicated Investigation Team
2024 Optimization Measures: Tiered Management, Efficient Response

External: "24-Hour Response Mechanism"
2024 Optimization Measures: Establishment of a Digital Customer Complaint System



In 2024, JA Solar's average customer satisfaction score was

94.80

Building a Professional Team

To further understand customer needs and elevate service levels, the Company has established diversified communication and feedback channels. Customers can obtain service support or provide feedback through various channels such as the official website, official WeChat account, headquarters telephone, and customer service email. Meanwhile, the Company conducts annual customer satisfaction surveys to systematically understand customer needs. Through a regular customer communication mechanism, the Company actively listens to customer opinions and continuously optimizes service efficiency and quality. During the reporting period, JA Solar received 2,913 customer complaints, including 607 product complaints. During the same period, there were 0 incidents of proactive product recalls due to quality issues, and the customer complaint resolution rate was 100%.



JA Solar places great importance on the quality of customer service and regularly conducts targeted customer service training to enhance the professional capabilities and service levels of the team. During the reporting period, the Company conducted over 30 themed training sessions to comprehensively improve the professional quality and problem-solving abilities of customer service personnel. Meanwhile, the Company organized over 190 external operation and maintenance knowledge training sessions to comprehensively enhance the skills of on-site power station installation and maintenance personnel.



With its excellent service quality and professional technical support, JA Solar has received high recognition and praise from customers. In 2024, JA Solar's on-site services received over 20 letters of appreciation, banners, and honorary awards from customers.



Co-building a Responsible Supply Chain

1.3

We are keenly aware that a well-established supply chain management system is an important support for the sustainable development of the Company. By implementing systematic control, strengthening risk identification and prevention, and carrying out collaborative empowerment measures, we actively build a responsible supply chain system that covers the whole lifecycle of products and services, promoting the low-carbon and equitable transformation of the value chain.

Optimizing Quality Management

1.3.1

During the reporting period, JA Solar had a total of 110 core suppliers

110

JA Solar adheres to international initiatives and standards such as the core conventions of the International Labor Organization and the ten principles of the United Nations Global Compact, establishing a responsible supply chain strategy system themed "Together Towards Tomorrow" to ensure the standardization and systematization of sustainability management for suppliers. According to the Rules of Procedure of the ESG and Compliance Management Committee, the ESG and Compliance Management Committee is responsible for overseeing the implementation of the supplier ESG management plan and reporting on responsible supply chain matters to the board of directors, continuously promoting the iterative upgrade of the sustainability system of the supply chain.

The Company provides strong support for achieving end-to-end efficient collaboration by formulating management systems such as the *New Supplier/New Material Introduction Management Policies*, *Supplier Daily Management Regulations*, *Measures for Monitoring Key Characteristics of Raw Materials*, *Supplier Materials Evaluation Regulations*, *JA Solar Responsible Sourcing Policy*, and *JA Solar Supplier Code of Conduct*, continuously improving the supply chain management system and clearly defining responsibilities and risk management for suppliers.

During the reporting period, we continued to strengthen training for procurement personnel, ensuring that all procurement staff completed specialized training in responsible supply chain management, thereby enhancing sustainable procurement capability.

Supply Chain Distribution



The Company explicitly requires all links in the supply chain to strictly adhere to labor rights protection, environmental protection, and business ethics as outlined in the *JA Solar Supplier Code of Conduct* and has incorporated these requirements into the supplier lifecycle management system. In addition, the Company regularly review our purchasing practices toward suppliers according to ESG requirements and actively responds to the call of the Solar Stewardship Initiative (SSI) to continuously improve management system in accordance with its ESG audit requirements. Yangzhou and Fengxian production sites¹ passed SSI ESG audit, and was awarded the Silver Medal in March 2025.

The main content of the JA Solar Supplier Code of Conduct

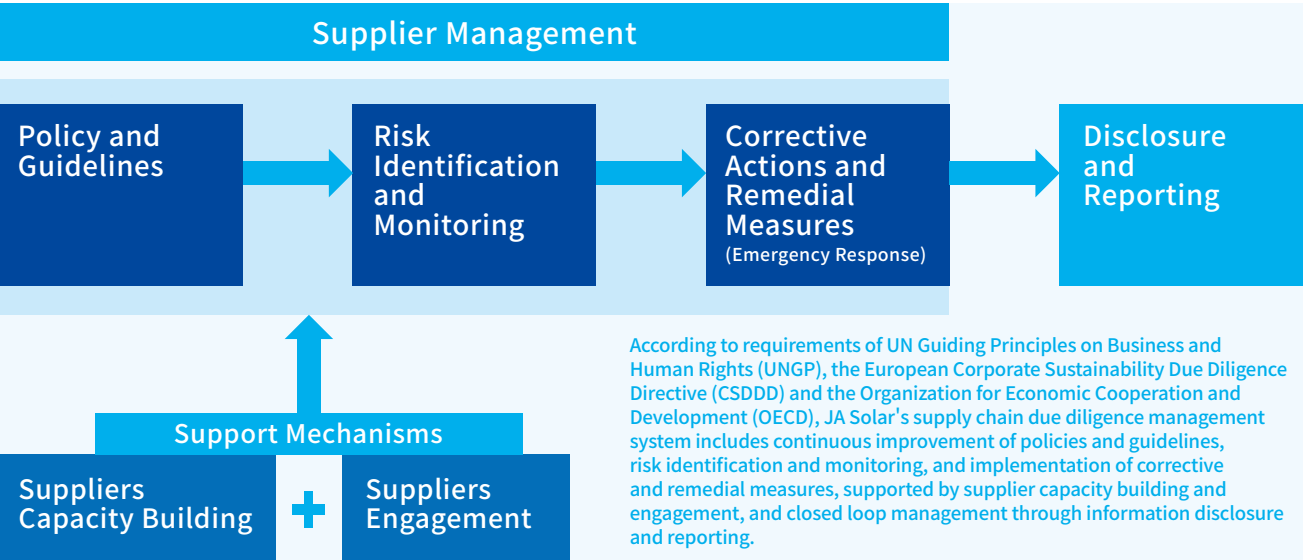
<div>Labor and Human Rights</div> 	Child labor in any form is not permitted.
	Forced labor in any form is not allowed.
	Wages must be paid on time and must meet at least the applicable legal requirements.
	Overtime should be based on voluntary principles and reasonable rest time must be provided.
	Discrimination in any form is not allowed.
<div>EHS Management</div> 	Respect for employees' rights to voluntarily establish, join, or not join trade unions or similar legitimate representative organizations, as well as their rights to participate in collective bargaining.
	Respect and support the development of the community where operations are located.
	Responsible mineral sourcing shall be ensured through comprehensive due diligence and monitoring.
	ISO system certification shall be carried out.
	Compliance with all applicable laws and regulations regarding the prohibition or restriction of specific substances must be ensured.
<div>Corporate Governance and Business Ethics</div> 	Management systems for water resources, GHG emissions, energy management, and biodiversity conservation shall be established.
	Mechanisms for health and safety risk assessment and preventive controls shall be developed.
	Plan for emergencies shall be conducted and corresponding response systems implemented.
	Comply with laws and regulations on hazardous materials control.
	Commercial bribery and corruption are strictly prohibited.
	Data compliance and privacy protection must be upheld.
	Intellectual property rights shall be respected and protected.
	Monopolistic practices and unfair competition are not permitted.
	All reasonable measures must be taken to prevent funds from being used for unlawful purposes.
	Requirements for supply chain traceability and integrity must be met.

¹ The SSI ESG audit adopts the SSI ESG standard, which is mainly based on the EU CSRD ESRS standard and focuses on key issues related to the photovoltaic industry. The SSI traceability standard aims to ensure that the solar value chain consistently adheres to ethical norms.

Responsible Procurement Chain
1.3.2

JA Solar is committed to continuously monitoring and promoting compliance with social and environmental requirements throughout the supply chain. Through policies such as the *JA Solar Responsible Sourcing Policy*, we continuously improve risk-based supply chain due diligence management processes and measures, establishing a responsible procurement chain that covers the whole process from supplier admission, assessment and monitoring, corrective improvement, and exit, to supplier empowerment.

Responsible Supply Chain SOP



Supplier Access

In 2024
The signing rate of the *JA Solar Supplier Code of Conduct* among core suppliers reached 100%

100%

100% of JA Solar's main material suppliers have passed the **ISO 9001** Quality Management System Certification

100%

91% have passed the **ISO 14001** Environmental Management System Certification

91%

90% have passed the **ISO 45001** Occupational Health and Safety Management System Certification

90%

When establishing partnerships with new suppliers, JA Solar carefully screens its direct suppliers, assessing their human rights, labor management performance, environmental, social, and climate-related ESG risks through public databases, and prioritizes suppliers with relevant ESG certifications, carbon footprint certifications, traceability, and compliant, superior labor management performance, carbon values.

Before introducing new suppliers, a *JA Solar Supplier Code of Conduct* must be signed by the Company to ensure the integrity and compliance of the introduction process, meeting the Company's needs for technological advancement, cost control, and environmental protection. In 2024, the Company clarified the responsibilities of various departments in the supplier introduction documents and promoted improvements in comprehensive and large-scale supply chain management during the introduction process.

Green Procurement

JA Solar practices the concept of green development in supply chain management, encouraging raw material suppliers to obtain carbon footprint certifications, and prioritizing local suppliers by building regional procurement networks, favoring the purchase of environmentally friendly materials to enhance both procurement efficiency and energy-saving emissions reduction, thereby minimizing the environmental impact of the procurement process.

During the reporting period, the Company conducted investigations on all main material suppliers regarding the *Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS)* and the *Regulation on Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH)*, requiring suppliers to provide relevant independent third-party reports annually to ensure that module materials comply with RoHS and REACH standards.



Assessment and Monitoring

Based on the *JA Solar Supplier Code of Conduct* and other policies, we convey ESG compliance requirements and expectations in the supply chain and continuously monitor and assess suppliers' compliance status through supplier sustainability assessment questionnaires, and on-site audits (including factory visits, employee interviews, document reviews, etc.).

JA Solar proactively assesses potential ESG risks in the supply chain. First, we identify the priority suppliers based on relevant risk indicators. Second, we require suppliers within this scope to complete the supplier sustainability assessment questionnaires to preliminarily assess potential environmental and human rights risks, and form an internal joint audit team to audit the suppliers. Based on the survey results of the supplier sustainability assessment questionnaire, the Company deeply analyzes potential risks from the dimensions of labor and human rights, occupational health and safety, environment, and management systems, and prioritizes the risks. Finally, based on the internal risk assessment results, the Company collaborates with a third-party professional audit team to conduct in-depth audits of suppliers identified as high-risk, along with other measures to monitor the risks.

In 2024, JA Solar conducted supplier sustainability assessments for 104 suppliers of key categories, including silicon materials, cell materials, and module materials.

104

In 2024, JA Solar conducted a centralized ESG audit for silicon material suppliers. The Company invited a third party to conduct ESG audits of suppliers, and the audit conclusions found that all suppliers had no related risks, with most suppliers at a good level or above. For category suppliers, the Company invited a third party to conduct on-site SA8000 social responsibility management system audits. The covered suppliers have good assessment results in environmental protection responsibilities, ethical responsibilities, fair competition, anti-corruption, relationship, and capacity building, among other areas.

Responsible Supply Chain Goal:
By the end of 2025, JA Solar will 100% conduct third-party on-site audits for high-risk core suppliers.

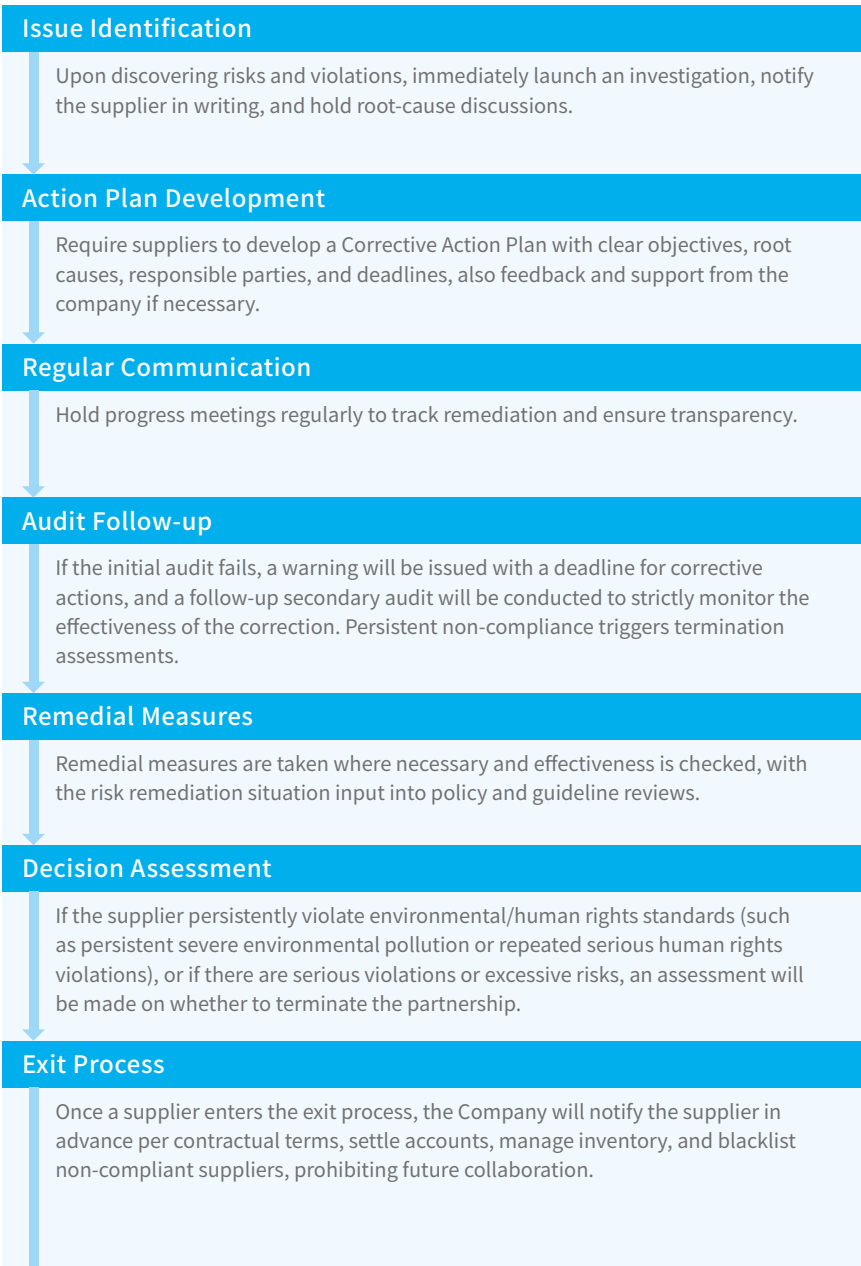
100%



Correction, Improvement, and Exit

Corrective Actions and Remedial Measures (Emergency Response)

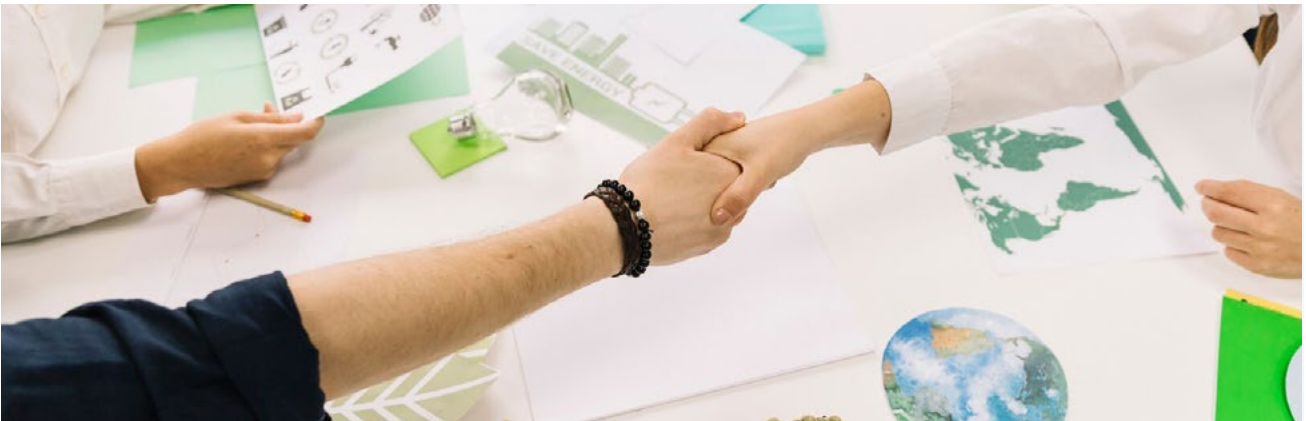
During the supplier assessment and audit process, if any issues or non-compliance situations are identified, JA Solar will require suppliers to take corrective actions and will track the progress of these corrective measures, conducting follow-up audits. Meanwhile, JA Solar will implement targeted corrective measures based on the severity of the non-compliance situation.



In 2024

JA Solar conducted written and on-site audits of suppliers, who developed corrective action plans based on the audit results, with a final issue rectification rate of 100%

100%



Supplier Empowerment and Participation

While strictly managing the risks of sustainability in the supply chain, JA Solar also focuses on empowering partners by organizing training on key sustainability issues for supply chain partners and providing systematic core knowledge on sustainability. Through technical collaboration and resource sharing, we help suppliers enhance their ESG capabilities and build a shared-responsibility supply chain ecosystem. During the reporting period, JA Solar conducted multiple ESG training sessions for supply chain partners, covering topics such as sustainable development concepts, CDP decarbonization training, SA8000, and labor rights training.

To continuously improve suppliers' performance in environmental, social, and governance aspects, JA Solar has established various incentive measures for suppliers that excel in sustainability assessments. For qualified suppliers, the Company will increase transaction volume, prioritize trading opportunities, raise supply or raise supply ratios.

JA Solar is keenly aware that there may be significant differences in responsibility allocation and available resources due to the varying sizes and resources of suppliers. The Company fully understands and supports small and medium-sized enterprises (SMEs) by empowering them through various forms of collaboration to enhance their ESG management capabilities, working together to promote positive industry development. In addition, the Company regularly communicates and negotiates with suppliers, collects issues and suggestions through a complaint mechanism, identifies supplier management problems for subsequent improvements, and archives all communication feedback for future reference.

Responsible Supply Chain Goal:

By the end of 2025, we plan to provide training on supply chain sustainability and ESG compliance for employees in the procurement center, as well as online training on sustainability and ESG compliance for all core suppliers.

ESG

JA Solar Collaborates with Suppliers to Empower ESG

CASE



In 2024, JA Solar suppliers participating in the CDP Supply Chain Program accounted for over 68% of the procurement amount. JA Solar organized specialized training for suppliers on ESG and SA8000, covering ESG rating standards, carbon emission standards, compliance standards, and sustainability assessment standards.



Traceable Supply Chain

1.4

JA Solar is committed to building a transparent and traceable supply chain management system, promoting full-chain implementation where the source of raw materials is traceable, processes are monitorable, and responsibilities are accountable. We incorporate the management of critical minerals as a core topic in the supply chain to ensure that the procurement and use of critical minerals comply with sustainability principles.

Raw Material Traceability

1.4.1

Leveraging digital technology and upholding the concept of lifecycle management, JA Solar has achieved traceability of raw material sources, monitoring of processes, and accountability, effectively enhancing the transparency and controllability of the supply chain. In early 2024, JA Solar officially launched the domestic tracing system project, aiming to build a digital traceability system integrating three centers: "Data Center", "Document Center", and "Tracing Center". The system focuses on automated full-chain traceability from modules to polysilicon materials, incorporating multiple functions such as traceability queries, tracing document downloads, and a production map overview.

In addition, JA Solar will further optimize the raw material tracing system from two dimensions: business management and the tracing system. From the perspective of business management, JA Solar plans to implement unified management of raw material granularity across various production sites through systematic management methods, and aims to optimize and upgrade the relevant Warehouse Management System (WMS) by 2025. In terms of tracing system construction, JA Solar not only focuses on creating a full-chain automated traceability function from modules to polysilicon materials but also designs traceability functions for non-silicon materials and adds an external import function for polysilicon material suppliers to meet the subsequent demand for traceability to the source of the minerals.



Official Launch of the Domestic Tracing System Project

CASE

In November 2024, the first chain domestic tracing system project officially started and entered trial operation, covering Hefei, Dongtai, Yangzhou, and Baotou production sites. The system is scheduled for official rollout in the second half of 2025. While improving the quality of tracing data in the first batch of production sites, the Company is simultaneously promoting the digital construction of tracing systems in other production sites and will gradually expand the management scope of traceable materials, extending vertically to traceability of upstream silicon mines and horizontally to traceability management of non-silicon materials.



Key Mineral Management

1.4.2

JA Solar always conducts ethical procurement and complies with the *Chinese Due Diligence Guidelines for Mineral Supply Chains*, the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* (hereinafter referred to as the "OECD Guidelines"), and the Responsible Minerals Initiative (RMI) compliance assurance measures. The Company does not use any mineral raw materials that may exacerbate conflicts, undermine human rights, or damage the environment, and explicitly requires suppliers to commit that the mineral raw materials come from environmentally and socially responsible sources, ensuring the traceability and controllability of the minerals used in the supply chain.

The Company is dedicated to responsibly sourcing minerals throughout the supply chain and has developed detailed *JA Solar Conflict Minerals Management Policy*. We are dedicated to reducing the use of minerals such as tin, tungsten, tantalum, and gold ("3TG") in our products and are dedicated to sourcing minerals in a manner that protects the environment and human health, respects human rights, and combats forced labor, child labor, and human trafficking, ensuring that the minerals used in our products do not lead to armed conflict, negative human rights impacts, or environmental degradation in conflict-affected and high-risk areas ("CAHRA"). Meanwhile, the Company actively traces the sources of conflict minerals used in its products and carries out diversified due diligence management.

Due Diligence Management Approach	Specific Content
Establishment of Management System	<ul style="list-style-type: none">We establish a management system, conflict mineral policy, due diligence procedures, and safeguard measures, and communicate them to its upstream suppliers while providing training for internal and external personnel to enhance due diligence capabilities.
Risk Identification and Assessment	<ul style="list-style-type: none">We regularly identify and assess the adverse impact associated with conflict minerals in the supply chain.
Risk Mitigation	<ul style="list-style-type: none">Based on supplier due diligence management and risk assessment outcomes, we design and implement response strategies, and require the supplier to promptly provide a remediation plan and take appropriated measures to mitigate the risk if associated risks are identified. We may suspend or terminate cooperation with suppliers who fail to implement corrective actions effectively.
Audits and Reviews	<ul style="list-style-type: none">We require some key suppliers to undergo independent third-party audits with stringent criteria and periodically review their policies and procedures while continuously improving responsible supply chain management.
Reporting and Transparency	<ul style="list-style-type: none">We continuously enhance supply chain transparency, regularly disclose mineral supply chain due diligence policies and practices, and accept supervision from all parties.

Meanwhile, we convey compliance requirements for conflict minerals to suppliers through policies such as the *JA Solar Supplier Code of Conduct* and the *JA Solar Responsible Sourcing Policy*, requiring suppliers to sign the *JA Solar Conflict Minerals Statement*. In 2024, the Company conducted annual conflict mineral due diligence using the Conflict Minerals Reporting Template (CMRT) issued by RMI, requiring suppliers to provide information about their upstream smelters or refiners, while also reporting their performance in conflict mineral management.

The conflict mineral materials involved in JA Solar are "tin", which is primarily used in junction boxes and solder strips; other conflict mineral materials are not involved. Through an investigation of the sources of "tin" used by a total of 20 suppliers of JA Solar's junction boxes and solder strips, it has been found that all sources of tin are produced in mainland China, with no minerals sourced from the Democratic Republic of the Congo or neighboring countries, and no involvement in the use of conflict minerals.

In 2024

All suppliers involved in the conflict mineral business have signed the *JA Solar Conflict Minerals Statement*, and JA Solar products have achieved 100% responsible sourced minerals.

100%

FASTER FOSTER
FAIRER FURTHER

FOSTER

Environmental Chapter

Net-zero Pathway Drives Circular Development



JA Solar envisions a "Zero-carbon Future" and integrates sustainability into its corporate strategy, actively building a sustainable ecological network that covers the entire value chain. JA Solar reshapes its development logic with "Symbiosis", promoting the deep integration of commercial value and ecological well-being. Through a refined environmental management model and practices of the circular economy, we endeavor to promote the efficient use and collaborative symbiosis of resources across the entire industry chain, striking a dynamic balance between production operations and ecological protection.

COMBATING CLIMATE CHANGE	2.1
IMPROVING ENVIRONMENTAL MANAGEMENT	2.2
FOSTERING GREEN CULTURE	2.3
CREATING A CIRCULAR ECONOMY	2.4



Combating Climate Change

2.1

As a company operating in an industry inherently aligned with green principles, JA Solar actively explores greener approaches to its production and operations. We remain steadfast in accelerating carbon neutrality through systematic emission reductions, technological innovation, and international cooperation. In 2024, to further enhance the Company's climate-related risk management capabilities and identify relevant financial impacts, the Company released its first *Climate-related Disclosure Report and TCFD Report*, presenting in-depth risk and opportunity assessments for 133 assets globally, including in China, Vietnam, Japan, and Germany, and carrying out climate-related scenario analysis.

Governance

2.1.1

JA Solar places great importance on climate change issues, positioning its climate governance framework as a key component of the Company's organizational structure, and has established a three-level climate governance framework with close coordination and clear division of responsibilities under the leadership of the Board of Directors. The Board of Directors should receive at least one report annually on the progress of climate-related work and guide the advancement of these efforts. We incorporate climate action indicators such as the percentage of renewable energy usage and the compliance rate of waste emissions into the annual performance evaluations of senior management, providing incentives based on actual achievements to ensure the effective implementation of climate governance goals. Moreover, we actively conduct training on climate change issues for Board members and engage in communication and resolutions regarding climate change risks.

Level	Governance Structure		Description of Authority
Board Level	Board of Directors	Providing high-level guidance and overseeing the strategy	Establish the Company's climate governance framework and management mechanisms
	Strategy and Sustainability Committee		Lead and supervise the Company's response to climate change, approve the planning and setting of the Company's climate and strategic ESG goals
Management Level	ESG and Compliance Management Committee	Developing strategy and coordinating actions	Develop the Company's climate strategies and goals, implement the strategic deployment of the Strategy and Sustainability Committee under the Board of Directors, and promote the implementation of climate change-related work in all business area
Implementation Level	ESG Management and Sustainability Department	Implementing strategies and coordinating internal and external works	Implement resolutions related to ESG, climate, and sustainability, promote the implementation of all climate strategies, and coordinate with relevant personnel from all centers, departments, and sites to achieve integrated and collaborative efforts

Strategy

2.1.2

JA Solar actively responds to climate change, contributing to the achievement of the goal of limiting the temperature increase to 1.5° C above pre-industrial levels in the *Paris Agreement* through its actions. The Company has developed four major strategies to promote low-carbon transformation and climate adaptation, continuously leading the global energy transition and moving towards net-zero emissions.

Four Major Strategies	Specific Content
Conducting Green Production	■ Reduce energy consumption and GHG emissions from construction to operation in the park through BIPV (Building Integrated Photovoltaics) and self-consumption distributed photovoltaic power generation
Cooperating with Low-carbon Partners	■ Prioritize suppliers that provide environmentally friendly and low-carbon raw materials, and establish long-term cooperative relationships with them to ensure a stable and sustainable source of raw materials
Cultivating Climate Awareness	■ Advocate for a green culture, implement green office practices, promote energy conservation and emission reduction in operational processes, and integrate low-carbon measures into daily work
Addressing Physical Climate Risks	■ Consider climate risks in the selection of production sites and photovoltaic power station sites, evaluate the impact of climate risks on business continuity during operations, enhance emergency disaster response capabilities, prepare emergency plans, and conduct drills



JA Solar further deepens climate analysis based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) framework and the *IFRS S2 Climate-related Disclosures* issued by the International Sustainability Standards Board (ISSB). The Company has chosen authoritative climate scenarios from the Intergovernmental Panel on Climate Change (IPCC) and the International Energy Agency (IEA) for stress testing, studying, and organizing the potentially significant impacts, modes of impact, and time dimensions of different categories of climate risks on the Company's business, strategy, and financial planning. These efforts provide decision support for optimizing climate risk response and management and developing a more resilient strategy.



Physical Risks

For physical risks, we selected four main future climate change scenarios based on the Representative Concentration Pathways (RCP) and Shared Socioeconomic Pathways (SSP) published by the IPCC:

Climate Scenario	Scenario Type	GHG Emissions	Projected Increase in Global Average Temperature by 2100
SSP5-8.5	Very high GHG emissions	CO ₂ emissions triple by 2075	3.3 - 5.7°C
SSP3-7.0	High GHG emissions	CO ₂ emissions double by 2100	2.8 - 4.6°C
SSP2-4.5	Intermediate GHG emissions	CO ₂ emissions around current levels until 2050, then falling but not reaching net zero by 2100	2.1 - 3°C
SSP1-2.6	Low GHG emissions	CO ₂ emissions cut to net zero around 2050	1.3 - 2.4°C

Transition Risks

For transition risks, we used three transition scenarios published by the IEA:

Climate Scenario	Scenario Type	Main Content	Projected Increase in Global Average Temperature by 2100
IEA NZE Scenario	Normative Net Zero Emissions by 2050 Scenario	■ Describe a pathway for the global energy sector to reach net zero CO ₂ emissions by 2050 with advanced economies reaching net zero emissions in advance of others, meeting key energy-related Sustainable Development Goals (SDGs), and aligning with emissions reductions assessed in the IPCC's Sixth Assessment Report	Approximately 1.5°C
IEA APS Scenario	Announced Pledges Scenario	■ Illustrate the extent to which announced ambitions and targets can deliver the emissions reductions needed to achieve net zero emissions by 2050 and assume countries implement their national targets in full and on time according to all recent major national announcements as of the end of August 2023	Approximately 1.7°C
IEA STEPS Scenario	Stated Policies Scenario	■ Provide a sense of the prevailing direction of energy system progression, based on a detailed review of the current policy landscape by not taking for granted that governments will reach all announced policies and goals, and assess a broad spectrum of policies	Approximately 2.4°C



Under different climate scenarios, JA Solar has conducted quantitative analyses of climate risks based on the geographical locations and business conditions of its production sites, assessing the financial impacts of climate risks and making comprehensive judgments on the degree of climate impact, identifying significant physical risks, transition risks, and climate-related opportunities. We have also developed corresponding overall plans to adapt to potential physical risks and seize related opportunities.

Categories and Impacts of Physical Risks						
Risk Category	Risk Factor	Risk Description	Scope Dimension	Time Dimension	Potential Impact	Impact Level
Acute Risk	Extreme weather	Extreme weather events such as heavy rain, floods, and typhoons triggered by climate change may threaten the equipment and infrastructure of JA Solar's production and operation sites, as well as facilities like the photovoltaic power stations owned by the Company. This could also lead to disruptions or interruptions in the supply of raw materials and product logistics, as well as delays in ongoing projects.	Whole value chain	Short-Medium Term	Asset loss, increased operating costs	Low
Chronic Risk	Long-term natural risks	Chronic risks caused by climate change include persistent high temperatures, droughts, and rising sea levels. These risks may affect JA Solar's production and operation sites, photovoltaic power plants, and other infrastructure located in climate-sensitive areas, water-sensitive areas, or low-elevation regions, and may also impact employee health.	Self-operations	Long Term	Asset loss, increased cooling costs, and reduced employee efficiency and engagement	Low

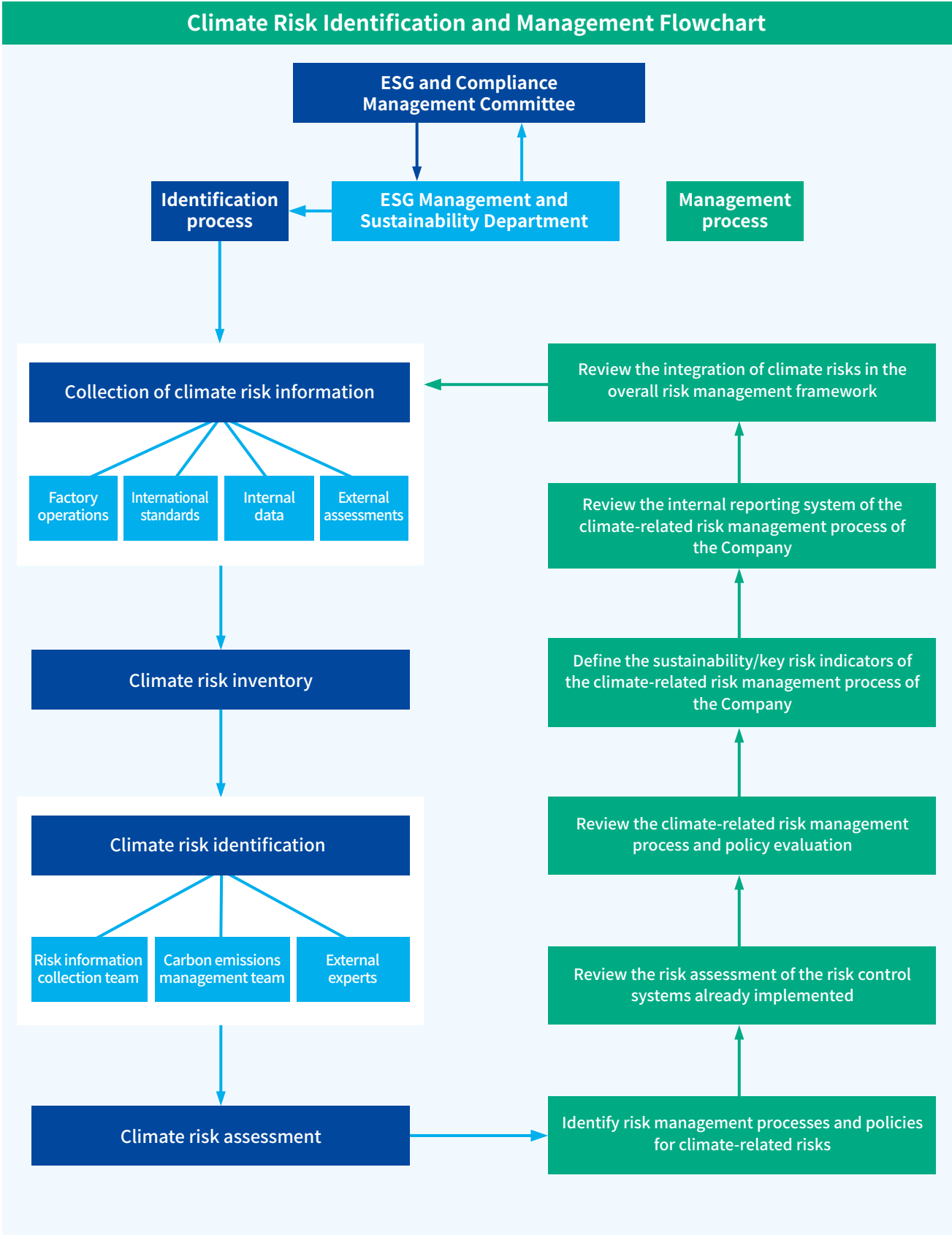
Categories and Impacts of Physical Risks						
Risk Category	Risk Factor	Risk Description	Scope Dimension	Time Dimension	Potential Impact	Impact Level
Policy and Legal Risks	Existing policies	The introduction of climate-related policies such as China's 14th <i>Five-Year Plan for Industrial Green Development</i> and the EU's <i>Net-Zero Industry Act</i> has raised higher requirements for enterprises to practice green production, build green factories, and reduce carbon footprints. The national carbon market is continuously developing, and in addition to power generation companies, the country will accelerate the inclusion of eight key industries into the carbon market. The increasingly stringent carbon market regulations and the broader industries involved will raise JA Solar's operating costs.	Self-operations	Short-Long Term	Increased operating costs	Medium
	Emerging policies	Regulatory authorities are imposing higher requirements for climate information disclosure from listed companies. Ambitious national emission reduction targets and net-zero actions will require companies to accelerate their climate transition, increasing their policy costs.	Self-operations	Short-Medium Term	Increased compliance costs	Medium
	Legal litigation	As governments and regulatory authorities around the world pay increasing attention to climate issues, and as more laws and regulations related to climate issues are introduced, the number of legal cases related to climate issues continues to grow.	Self-operations	Short-Medium Term	Increased compliance costs	Low
Technical Risks	Technological iteration	With the rapid expansion of the global new energy industry, users have higher demands for the power generation efficiency and stability of photovoltaic modules. Meanwhile, with the ongoing focus on product carbon footprints in the future, managing the carbon footprint throughout the entire product lifecycle is an urgent issue that needs to be addressed.	Self-operations	Short-Long Term	Increased operating costs and reduced revenue stability	Medium
	Scientific and technological R&D	The timing of technology development and application is an important uncertain factor. Looking to the long term, outdated technologies and high-cost capacities will gradually be optimized and eliminated, thereby optimizing the industrial structure and initiating a new round of industry growth cycles. Failure to accurately assess the development dynamics of key technologies in the photovoltaic industry, as well as the direction of new technology and product R&D, may lead to losses in R&D investment.	Self-operations	Medium-Long Term	Loss of R&D investment, risk of asset stranding	Medium
Market Risk	Changes in the supply and demand pattern of the industry chain	The carbon price pressure from upstream suppliers and the requirements of downstream consumers for the carbon footprint of products will lead to changes in the existing upstream and downstream supply chain structure.	Supply chain	Medium Term	Increased costs, decreased revenue	Low
Reputational Risk	Stakeholder expectations	Climate issues have gained widespread global attention, and inadequate responses to climate change may lead to negative evaluations of the Company by stakeholders such as customers, investors, the public, and the media, thereby damaging brand value.	Whole value chain	Medium-Long Term	Damaged brand value and increased stock price volatility	Low

Identification of Climate-related Opportunities

Potential Opportunities	Opportunity Description	2024 Performance
Increase in Product Application Market	With the advancement of global "net zero" goals, the pace of energy transition is accelerating, and the application fields of photovoltaic products will expand. According to the 1.5° C temperature rise control scenario proposed in the <i>World Energy Transition Outlook</i> published by the International Renewable Energy Agency (IRENA) in 2023, by 2030, the global installed capacity of renewable energy needs to exceed 11,000 GW with solar photovoltaic and wind power accounting for about 90% of the newly added renewable energy generation capacity.	JA Solar's module shipments exceeded 79.447 GW covering 178 countries and regions, maintaining a leading position globally. The Company's core product, the n-type high-efficiency photovoltaic module DeepBlue 4.0 Pro, has been widely launched in the market, along with two new high-efficiency module products: the 0BB module and the single-glass anti-dust module, significantly increasing product reliability in various scenarios.
Customer Demand for Low-carbon Product	As awareness of climate change increases, customers' consumption concepts are changing. Both businesses and individual consumers are gradually incorporating low-carbon and environmentally friendly considerations into their purchasing decisions.	JA Solar consistently integrates the concept of green and low-carbon throughout the entire product lifecycle, providing customers with green solutions from multiple dimensions, including innovative R&D, manufacturing, low-carbon products, and comprehensive solutions. The Company actively promotes product life cycle assessment, and all mainstream products have passed the French Certisolis carbon footprint certification. The carbon value of mainstream n-type products has decreased to below 400 kgCO ₂ e/kW.
Improvement in Energy Use Efficiency	The Company reduces carbon emissions in its operations by applying photovoltaic power generation to its daily operations and purchasing green electricity while gaining advantages in carbon trading and government incentives.	The amount of clean energy used exceeded 2,939,108 GWh, and the installed capacity of self-generated distributed power stations reached 298 MW.
Improvement in Financing Efficiency	The Company is committed to improving its ESG rating results, aiming to be included in major international sustainable financing efficiency development indices to attract more investors. Obtain more low-carbon certifications to secure green loans at lower interest rates, fully broaden financing channels, and reduce financing costs.	JA Solar actively participates in various ESG-related ratings in the capital market, continuously improving rating performance through disclosure optimization and management enhancement, gaining recognition in the capital market.

Risk Management
2.1.3

JA Solar has incorporated climate risks into its Enterprise Risk Management (ERM) framework. Based on the results of climate scenario analyses, the Company continues to improve the identification, measurement, and monitoring of climate risks. It also develops targeted response strategies and implements corresponding actions and measures for different types of climate-related risks, thereby continuously enhancing its climate risk management capabilities.



Indicators and Targets

2.1.4

JA Solar continues to promote energy-saving and low-carbon manufacturing, supports sustainable investment and financing, and is committed to contributing to the transformation towards a sustainable future for all humanity through its products and services. Our goal for 2030 is to achieve 100% certification related to sustainability for mainstream suppliers. We also commit to achieving net-zero GHG emissions by 2050, striving to become a global leader in sustainable development. In December 2024, JA Solar's SBTi targets were officially certified, with the following details:

Target Year	Scope 1 & Scope 2 Targets	Scope 3 Targets
Short-term Target 2034	Reduce absolute scope 1 and scope 2 GHG emissions 58.8% by 2034 from a 2023 base year 58.8%↓	Reduce scope 3 GHG emissions from purchased goods and services 63.8% per MW of solar related products produced by 2034 from a 2023 base year 63.8%↓
Long-term Target 2050	Reduce absolute scope 1 and scope 2 GHG emissions 90% by 2050 from a 2023 base year 90%↓	Reduce scope 3 GHG emissions from purchased goods and services, capital goods, fuel-and energy-related activities and upstream transportation and distribution 97% per MW of solar related products produced by 2050 from a 2023 base year 97%↓
Net Zero Target 2050	Achieve net-zero GHG emissions across the value chain	

To support the achievement of these goals, JA Solar continuously optimizes GHG emission management, enhances the disclosure of climate-related indicators (Scope 1, 2, and 3), and discloses performance measurement targets: including the identification and sorting of key indicators and determining performance measurement targets. Through carbon emission programs, budgeting, forecasting, and analysis control, the Company actively promotes intelligent carbon management and comprehensively conducts carbon inventory work. During the reporting period, all production sites have conducted GHG inventory in accordance with ISO 14064-1:2018 and A Corporate Accounting and Reporting Standard (GHG Protocol) and obtained third-party verification statements.

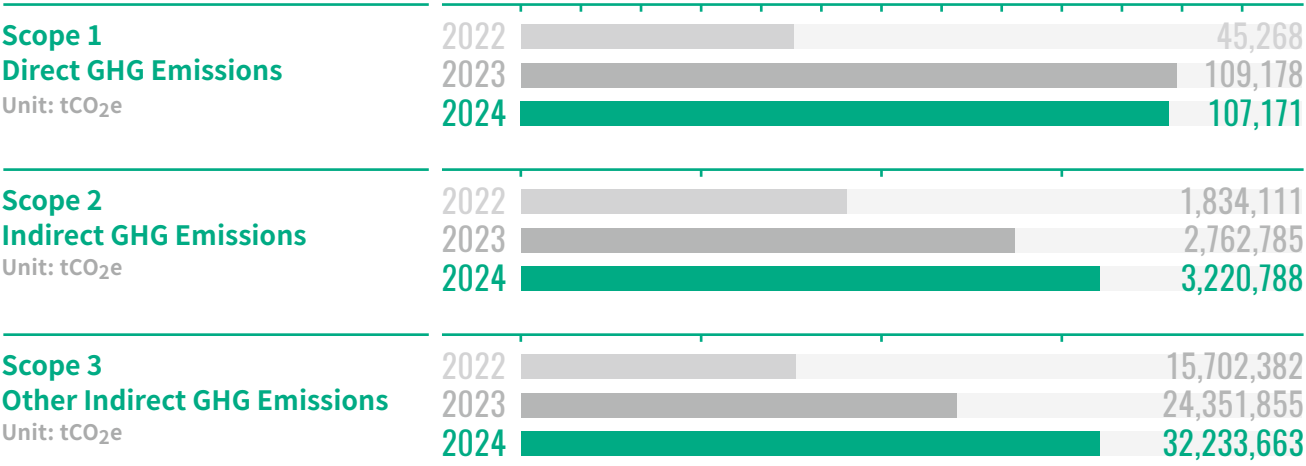
To further promote climate transition, the Company actively invests manpower and various resources, appointing carbon managers at the sites to monitor and manage the Company's carbon emissions, and actively implements multiple GHG emission reduction initiatives.

Emission Reduction Measures

Type of Emission Reduction	Scope of Emission Reduction	Key Measures
Direct Emission Reduction	Scope 1	<ul style="list-style-type: none">Reduction of the use of fuel vehicles: We have made it clear that no new fuel vehicles will be purchased for official use in the future, aiming to reduce greenhouse gas emissions associated with business travel.Energy Management Team: By establishing an Energy Management Team, we conduct regular itemized analyses of energy consumption levels, continuously optimize energy usage, and promote best practices across the Group.
Indirect Energy-related Emission	Scope 2	<ul style="list-style-type: none">Improvement of green electricity consumption: We use renewable energy electricity to systematically reduce the carbon footprint of purchased electricity by installing distributed photovoltaics on rooftops and green electricity direct purchase agreements.Smart energy management: We build an energy data center to collect and deeply analyze energy data in real time, accurately locate energy-saving optimization space, and improve overall energy efficiency.
Collaborative Emission Reduction along the Value Chain	Scope 3	<ul style="list-style-type: none">Low-carbon material substitution: We give priority to purchasing environmentally friendly materials such as recycled aluminum frames and low-carbon back panels, and work with suppliers to carry out carbon footprint accounting and emission reduction technology R&D.Green logistics system: We further promote green logistics modes such as road-rail combined transport and water-land combined transport to reduce carbon emissions from logistics throughout the product life cycle.

GHG Emissions¹ 2024

As a global leader in solar photovoltaic product manufacturing, JA Solar focuses on the research, development, and manufacturing of solar products that convert solar energy into electricity, applied in residential, commercial, and power station generation systems. Based on the shipment volume of cells and modules in 2024, we avoid the emission of over 50 million tCO₂e.



Key Performance

GHG Emissions Intensity (Scope 1 + Scope 2) Unit: tCO ₂ e/MW	41.89
Percentage of self-generated and self-used distributed electricity	2.24%
Self-generated and self-used distributed installed capacity	298MW
Percentage of green electricity use	34%
Avoided Emissions ² Unit: million tCO ₂ e	50 ⁺

¹ Greenhouse gas emissions increased in 2024 compared to 2023 due to higher shipment volumes.

² When calculating avoided emissions, the annual power generation hours of JA Solar's PV modules are assumed to be 1,300 hours. For key overseas sales regions, grid emission factors published by the European Commission (January 2024) and the U.S. Environmental Protection Agency (January 2025) are adopted. For all other regions, grid emission factors issued by the Ministry of Ecology and Environment of the People's Republic of China (December 2024) are applied.

Improving Environmental Management

2.2

Environmental Management System

2.2.1

Low-carbon operations and green development are key pillars of our commitment to sustainable development. We continuously refine our environmental management practices and remain dedicated to improving the efficiency of energy and resource utilization. By advocating clean production and ensuring the efficient and compliant disposal of various types of waste, we actively promote green manufacturing and operational practices. Through the establishment of clear environmental management objectives, we drive the implementation of sustainable production across all stages. Our ultimate goal is to build a green industrial park throughout its entire lifecycle and to foster the coordinated advancement of both corporate growth and environmental benefits.

JA Solar strictly complies with the *Environmental Protection Law of the People's Republic of China*, *Regulations on the Environmental Protection Management of Construction Projects*, *Integrated Wastewater Discharge Standard*, *Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution*, *Regulations on Administration of Pollutant Discharge Permits*, and other relevant laws and regulations at the operational location to ensure that corporate operations meet environmental protection requirements. At the corporate level, we have established a comprehensive environmental system and periodically revise policies to ensure that our environmental management fully meets the latest domestic and international legal requirements.Taking a target-oriented management approach, we continuously reduce environmental impact by setting specific goals and driving substantial achievement. Currently, our environmental management system covers environmental goals, management plans, green production, waste disposal, and environmental monitoring, forming a comprehensive environmental management process. We link environmental management performance indicators with the performance evaluations of senior executives and various production sites, establishing a full-chain environmental management supervision system led by the headquarters' Environment, Health, and Safety (EHS).

■ During the reporting period, all production sites that had officially been put into operation by JA Solar had passed the ISO14001 environmental management system certification.

100%

System Constraints	Develop a series of policies and systems such as the <i>EHS Management System Manual</i> , the <i>Guidelines for EHS Management of JA Solar</i> , and the <i>Environmental Protection Management Procedures</i> , and regularly update them based on actual conditions to ensure compliance with the latest environmental protection standards.
System Supervision	Establish a full-chain supervision system where the headquarters' EHS management department oversees the environmental management implementation at each site, and each production site sets up dedicated EHS health and safety departments to fulfill local management responsibilities, and regularly report data to the headquarters.
Performance Linkage	Establish a binding mechanism through the "Annual Environmental Performance Indicator Assessment Mechanism": the headquarters conducts quantitative assessments of production sites, and the assessment results are directly linked to the performance evaluations of the production site management and company executives, driving the implementation of environmental management responsibilities at all levels.

Environmental Management Process

Type of Measures	Specific Content
Definition of Goals	1 ■ Determine environmental protection goals and quantifiable indicators for each department, such as setting targets for air pollutant and wastewater reduction, and waste recycling rates, while mobilizing all employees to participate in environmental protection efforts.
Development of Environmental Management Systems and Plan	2 ■ Develop an environmental goal management plan based on national and local laws and regulations and tailored to the organization's characteristics, and create plans for waste gas and wastewater treatment based on different environmental protection requirements.
Compliant Disposal and Green Production	3 ■ Ensure compliant disposal of waste gas and solid waste generated during production, establish an environmental management ledger, ensure the normal operation of environmental protection facilities, and promote green production processes to reduce pollutant generation at the source.
Daily Monitoring	4 ■ Prepare self-monitoring plans according to pollutant discharge permit management requirements, regularly commission qualified third parties for environmental testing, understand the status of environmental protection work and the operation of the environmental management system, promptly address any gaps, and ensure that wastewater, waste gas, and noise emissions meet standards.

Identification and Evaluation of Environmental Factors



In adherence to the concept of "early detection and early action", we carry out regular environmental risk management. We strictly follow internal management requirements such as the Environmental Factor Identification and Evaluation Procedures and the List of Significant Environmental Factors, establishing an environmental factor identification and evaluation process for the production site to systematically identify, assess, and monitor the environmental impact risk factors during the Company's operations.



Training on Environmental Factor Identification and Evaluation Methods

CASE

In 2024, the Ordos Production Site conducted its first environmental impact factor identification work for the production processes of modules. Training on environmental factor identification and evaluation methods was provided to all departments, which identified environmental factors related to the entire lifecycle of the Company's activities, products, and services on site. Based on the identified significant environmental factors, targets, indicators, and management plans were developed for effective control.

Emergency Response and Capacity Building

JA Solar's production sites have each developed emergency plans for sudden environmental incidents, systematically standardizing emergency response processes and responsibilities, and clarifying emergency management methods for various sudden environmental incidents. On this basis, each production site regularly organizes emergency training and drills for various scenarios of sudden environmental incidents, effectively enhancing the emergency response capabilities for such events. Over the past four fiscal years, the environmental management work at the Company headquarters and all production sites has steadily progressed, with no incidents of fines related to environmental or ecological issues.

Emergency Drill for Hazardous Waste Leakage at the Ordos Production Site

CASE

In September 2024, to enhance employees' emergency response capabilities for hazardous waste leakage incidents, the Ordos Production Site organized an emergency drill for hazardous waste leakage at the temporary hazardous waste storage site. This drill raised awareness and strengthened the self-rescue capabilities of the employees, while also helping the Company improve the emergency response procedures for hazardous waste leakage incidents.



Supervision and Evaluation Mechanism

In terms of the supervision and evaluation mechanism, the Company has established a supervisory system that combines internal audits with external verification. We regularly conduct internal audits to comprehensively inspect and evaluate the environmental management work of various departments and production sites, promptly identifying issues and proposing corrective suggestions. Meanwhile, third-party professional organizations are invited to conduct external verifications to ensure that the Company's environmental management work complies with national, international, industry, and local standards and regulations.

Key Performance

■ In 2024, the Company's investment in environmental protection reached RMB 87.61 million, mainly used for the construction and upgrading of pollution control facilities in the production process, the purchase of environmental monitoring equipment, and other operational management measures, to continuously improve the Company's environmental management.

87.61 RMB million

Building Green Parks
2.2.2

Guided by the concept of sustainable development, JA Solar deeply embeds ESG factors throughout the entire lifecycle of the green park. From the early project assessment and site selection to mid-term project initiation and review, and later operational evaluation, the Company strictly considers sustainability elements, closely linking investment operations with sustainable development goals, and striving to create a model of a green low-carbon park for the entire lifecycle.

Main Steps

Early Stage:
Project Assessment and
Site Selection



Middle Stage:
Project Initiation and Review



Late Stage:
Project Evaluation and Operation

Specific Content

- Through collecting information on environmental capacity and local environmental planning, we assess the potential impact of the project on the region after its implementation and actively assess the local green power supply.
- We consider multiple ESG factors such as the project site's environment, green power, water resources use, and local employment, implement sustainable site selection, identify related risks, and, if necessary, engage third parties for due diligence.
- We organize the preparation of project feasibility studies and financial evaluation reports and carry out the necessary project initiation reviews and approval processes for the Company's investment projects.
- In the project investment feasibility report, we integrate ESG factors such as green power usage into the review criteria to ensure the project aligns deeply with sustainable development goals.
- We require the production site and the invested project to evaluate their sustainability performance to ensure that the project achieves sustainability in technical, economic, and environmental dimensions.
- Based on rating criteria such as the *General Rules for Evaluation of Green Factories*, we conduct a comprehensive green upgrade, further increase the number of national and provincial green factory applications, and create green benchmark cases.

Key Performance

By the end of 2024, a total of 6 production sites under JA Solar have been awarded the title of "National Green Factory" by the Ministry of Industry and Information Technology.

6



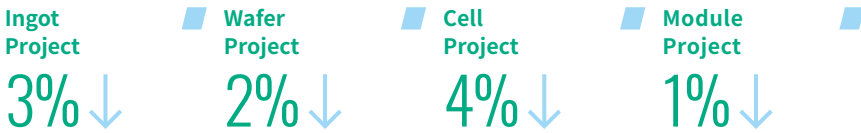
Energy Management

2.2.3

The Company strictly complies with relevant laws and regulations at its operating locations, such as the *Law on Energy Conservation of the People's Republic of China*, the *Renewable Energy Law of the People's Republic of China*, and the *Law of the People's Republic of China on the Promotion of Clean Production*. We have established internal policies and systems including the *Energy Management Measures*, *Energy Resource Management Policy*, and *Energy Management Manual*, which clarify the management responsibilities, processes, and assessment standards for energy management. The Company implements the three-level "company, workshop, and team" energy management and incentive assessment mechanism, breaks down energy-saving targets, and incorporates them into the performance evaluation system. Energy management is quantified and systematized, with regular inspections conducted on key energy consumption points in production workshops, and timely rectification of identified energy management issues to reduce unnecessary energy loss, continuously enhance energy-saving awareness, and optimize energy use efficiency. In 2024, the Company's energy management targets were all achieved.

2024 Energy Management Targets

Annual reduction rate of energy consumption per unit



As of December 31, 2024, seven PV production sites of JA Solar passed the ISO 50001 energy management system certification. In addition, in 2024, JA Solar New Energy Yangzhou Co.,Ltd. (Yangzhou Production Site) was awarded the "Four-Star Zero-Carbon Factory (Type I)" certification.

Energy Conservation and Consumption Reduction

Energy conservation and consumption reduction is an important approach for JA Solar to conduct refined energy management. We fully explore energy-saving potential and continuously improve energy efficiency through the introduction of digital systems, equipment upgrades, and process optimization. Relying on industrial internet technology, JA Solar has established an energy management network covering the entire production site, achieving intelligent management of energy data throughout the product lifecycle. Through intelligent management, the Company can collect and deeply analyze energy data in real-time, accurately identify energy-saving optimization opportunities, and simultaneously implement periodic energy audits, overseeing daily energy management and energy control in production workshops at various production site.

Shijiazhuang Production Site	The production site introduced the Smart Energy Management System (EMS) to achieve real-time monitoring of energy-consuming equipment and summary analysis of energy data, enhancing the level of refined energy management.
Baotou Production Site	The production site carried out comprehensive energy-saving technology renovation projects, optimizing the air energy heating system, water source heat pump heating system, and argon gas recovery process, with an expected annual energy saving of over 4,700 tce. Among these, the centralized heating renovation of the air energy system in the dormitory apartment buildings is expected to achieve an annual electricity saving of about 740,000 kWh.
Qujing Production Site	The production site implemented a special plan for energy conservation and consumption reduction, utilizing the heat recovery technology of air compressors and chillers to recycle heat for pure water heating, thus eliminating the need for high-power cleaning machine heating devices in the silicon wafer cleaning process, achieving an energy efficiency upgrade in the cleaning procedure. After the installation of an energy recovery device on the air compressor, the cleaning workshop can reduce electricity consumption by approximately 3,500 kWh per hour from electric heating rods, which is equivalent to an annual reduction of about 19,000 tCO ₂ e.
Xingtai Production Site	All non-road mobile vehicles powered by fuel in the factory area have been replaced with new energy vehicles. Currently, all 41 forklifts in the production site are new energy forklifts, significantly reducing the use of fossil fuels.
Yiwu Production Site	The rooftop photovoltaic project is expected to provide about 4.6 million kWh of electricity to the grid each year after completion. Compared with the same amount of thermal power generation, it is equivalent to saving nearly 1,500 tce each year.

Energy Efficiency Training

Meanwhile, we actively promote energy efficiency training for employees. By deepening the awareness of energy conservation, we integrate energy management knowledge into production and operational practices, effectively transforming energy-saving concepts into daily operational habits.

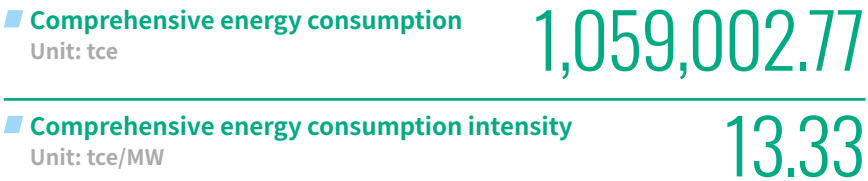
Training on Raising Energy Conservation Awareness at Xingtai Production Site

CASE

In 2024, the Xingtai Production Site took the lead in energy-saving and consumption-reduction initiatives. It organized department heads to interpret energy-saving policies, conduct benchmarking analyses of industry best practices, and provide training on the use of energy consumption diagnostic tools. Each department subsequently trained all employees and established a long-term promotion mechanism that translated awareness into action.



Key Performance



In 2024, JA Solar continued to promote the application of renewable energy. Through the construction of distributed photovoltaic power stations and the procurement of green electricity, the Company achieved a 34% annual proportion of green electricity usage. These efforts helped minimize energy consumption and GHG emissions during the production process. As one of the first participants in China's "Green Electricity 100%" (GE100%) Initiative, JA Solar launched pilot green electricity procurement project at key production sites, supporting the development of the renewable power consumption system.

Key Performance



Water Resource Management

2.2.4

In the face of the ongoing global challenge of increasing pressure on water resources, improving comprehensive management strategies and technologies for water resources has become an important task in addressing the water resource crisis. JA Solar strictly complies with the relevant laws and regulations of the operating regions, such as the *Water Law of the People's Republic of China*, and standardizes the entire process of water resource management from extraction, use, and recycling, to discharge in internal management policies like the *Energy Resource Management Procedures*.

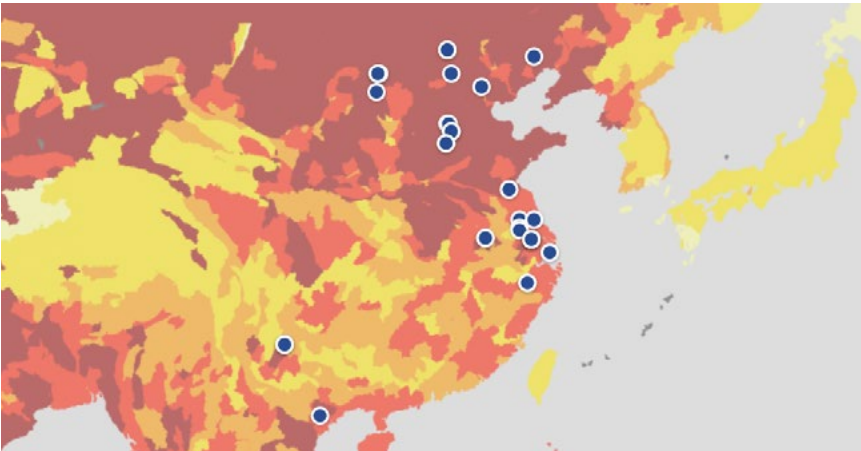
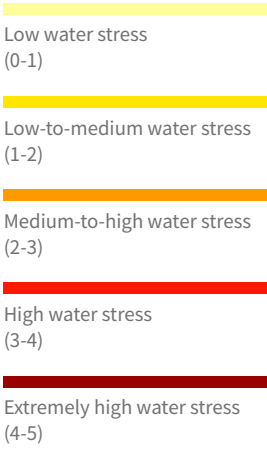
The production water usage of JA Solar is mainly in the production of silicon wafers and solar cells. We continuously improve the water resource management framework, with the Company's Board of Directors Strategy and Sustainability Committee serving as the highest management level for water resource governance, responsible for reviewing the establishment of water resource management goals. In 2024, we linked water conservation targets to the compensation of senior executives, including general managers of each production site, and each production site incorporated water usage targets into environmental management indicators.

2024 Water Resource Management Goals:
Water consumption per unit of output was reduced by 2% compared to 2023 - the target was completed

↓ 2%

Board of Directors Strategy and Sustainability Committee	Hears reports on the progress of water resource management, guides and reviews the setting of water resource management-related goals, and examines the progress of goal achievement
Work Safety Committee	Formulates water resource management plans and goals, evaluates the effectiveness of management measures to achieve these goals and guides the process of goal achievement
Plant Management Department	Undertakes and implements various water resource management plans, breaks them down to each production site, and implements performance assessments for goal achievement
Production Site	Implements all management measures to promote the achievement of water usage plans and goals

In 2024, we further introduced the latest version of the water risk assessment tool Aqueduct 4.0 published by the World Resources Institute (WRI) to assess water stress and risks in our global production and operation areas. The results show that in our main operating areas, extremely high-risk areas account for 52.4%, high-risk areas account for 19%, medium-high-risk areas account for 23.8%, medium-low-risk areas account for 0%, and low-risk areas account for 4.8%.

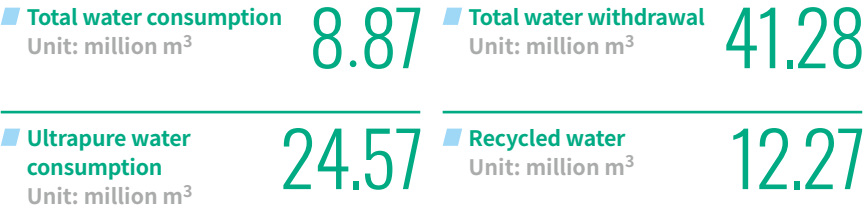


Water-Saving Facility Construction And Operation

In terms of water-saving facility construction and operation, we installed sensor-based water outlet valves and water-saving equipment in production workshops to reduce water consumption. The Company strengthens the maintenance and management of water-saving facilities to ensure their normal operation and improve water-saving effectiveness. Meanwhile, we actively optimize the water supply network by constructing rainwater recycling facilities at various production sites, using the collected rainwater for landscaping and other purposes, increasing the reuse rate of water, replacing freshwater extraction, and continuously reducing the environmental impact of water resources.

Key Performance

Water drop icon



Optimization of Process Flow in the Yiwu Production Site

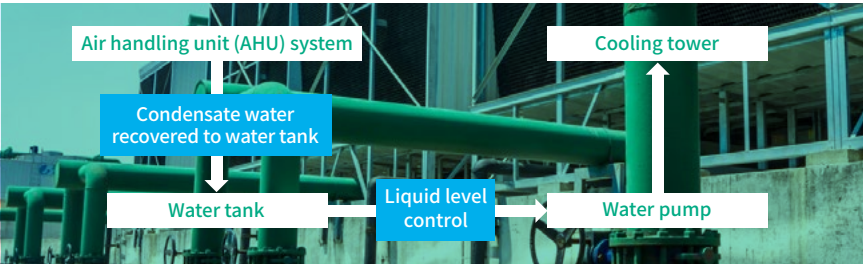
CASE

In 2024, the Yiwu Production Site adjusted the overflow method of certain processes in the cell workshop from continuous overflow to intermittent overflow, reducing the pure water consumption in the workshop by 136,309 tonnes while ensuring stable cell quality.

Air Conditioning System Condensate Water Recovery Project in the Yiwu Production Site

CASE

The Yiwu Production Site collected the condensate water generated by the air conditioning units during high summer temperatures and supplied it to the cooling tower through pump pipelines, saving approximately 74,000 m³ of water.



UF Ultrafiltration Backwash Water Recovery at the Dongtai Production Site

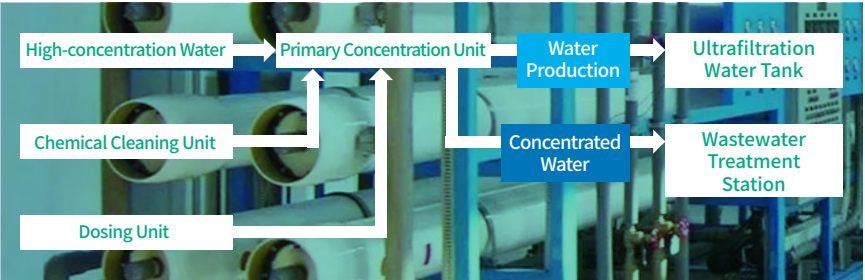
CASE

The Dongtai Production Site uses tap water during the UF ultrafiltration backwashing process. Compared to directly discharging the ultrafiltration backwash water, the production site has added an ultrafiltration system to the concentrated water tank reuse pipeline and valves, allowing for the complete recovery and reuse of all tap water after backwashing in the purification supply process. After the renovation, the production site can reduce the annual tap water usage by approximately 10,500 m³ on average, effectively lowering wastewater discharge and enhancing the efficiency of water resource recycling.

Ningjin Production Site High Concentrated Water Recovery Project

CASE

The Ningjin Production Site has added a reuse treatment system for the backwash water and highly concentrated water discharged from the pure water system, allowing for secondary recovery and use of highly concentrated water, effectively improving water resource utilization.



JA Solar has established a water resource management mechanism covering the entire value chain, accounting for water intake, consumption, and discharge in its production operations while actively promoting water resource management capabilities among suppliers, encouraging them to set water-saving goals, implement water-saving projects, and incorporating suppliers' water resource management performance into the supplier admission assessment. Meanwhile, we are actively promoting the establishment of water-saving goals and plans for suppliers, and will regularly conduct water-saving goal assessment and analysis work together with suppliers.

Emission and Waste Management
2.2.5

Waste Gases Management

JA Solar strictly complies with the laws and regulations of each operating location, continuously improving internal management systems and related procedural documents, adhering to the principles of reduction, resource utilization, and harmlessness, and taking multiple measures to reduce relevant pollution and waste discharge. Relevant discharge data is included in the performance evaluation of senior management for the reduction of emissions and waste, standardized disposal, and full resource utilization from top to bottom.

In adherence to the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution* and other laws and regulations of the operating locations, we formulated policies and management measures such as the *Air Pollutant Emission Control Standards* to achieve comprehensive monitoring and management of air pollutant emissions from the source, process, and end stages.

The key controlled pollutants generated during the production process at JA Solar are nitrogen oxides (NOx), sulfur oxides (SOx), volatile organic compounds (VOCs), ammonia, and particulate matter (PM). We have established a dual control mechanism of "self-inspection + external audit", equipped corresponding waste gas treatment facilities at each production site, and monitored the concentration of purified gases to ensure that all types of air pollutants fully meet the emission standards.

"Self-inspection + external audit" dual control mechanism

- Install online monitoring equipment to monitor waste gas emissions in real time;
- Set up dedicated maintenance inspection positions and establish a standardized inspection system for environmental protection equipment to ensure stable and normal operation of the equipment;
- Regularly entrust qualified third-party organizations to conduct routine monitoring of waste gas emissions and environmental quality at the production site.

- Goal: Achieve a 100% compliant waste gas emission rate
2024 Action: The target of a 100% compliance rate has been successfully achieved

100%



Waste Gas Collection and Treatment at Ningjin Production Site

CASE

In 2024, Ningjin Production Site effectively collected and treated waste gas emissions from the sewage treatment plant to eliminate unorganized emissions from the source. After the waste gas is collected, it enters the waste gas treatment facility, where it is effectively treated before being discharged, significantly reducing the adverse impact of waste gas on the surrounding environment. In addition, the Ningjin Production Site is actively exploring a hydrogen fluoride (HF) recycling project, recovering HF used in workshop machinery and reusing it in cleaning equipment. The production site not only reduces HF consumption but also effectively lowers atmospheric pollutant emissions.



Yiwu Production Site Ammonia Recovery Project

CASE

To effectively reduce pollutant emissions generated during the Plasma-Enhanced Chemical Vapor Deposition (PECVD) process in cell production, the Yiwu Production Site launched an ammonia recovery project in 2024. For the newly expanded cell production workshop, the site has added a production line for ammonia water recovery products, achieving an annual production capacity of 8,566 tonnes of 6% ammonia water recovery products. In comparison to the ammonia content in the waste gas emissions of the original PECVD project, after the ammonia recovery project was implemented, the amount of ammonia released into the atmosphere can be reduced to approximately 5.19 tonnes per year, about 10% of the pre-recovery level. This effectively minimizes the impact of production on the surrounding environment.



Secondary Activated Carbon Adsorption Device Project of the Hefei Production Site

CASE

To enhance the effectiveness of VOC treatment, the Hefei Production Site implemented a special renovation for the unorganized waste gas emissions from the hazardous waste storage in 2024. The production site has added waste gas collection equipment that can direct the escaping gases into the secondary activated carbon adsorption device. This device provides a dual protective barrier for waste gas emissions, enabling initial adsorption of large volumes of waste gas and further capturing residual pollutants in the discharged waste gas through refined filtration, effectively reducing the emissions of VOCs.



Waste Gas Emission Control Project at the Vietnam Production Site

CASE

To prevent the waste gas from the hydrogen sulfide (H2S) process from escaping and posing a hazard to nearby residential areas, the Vietnam Production Site has launched a systematic waste gas emission control project for the silicon wafer phase II plant. By inspecting the entire plant's exhaust system, the production site effectively identified potential risk points and developed an optimization plan for waste gas treatment. Ultimately, through measures such as optimizing the configuration of the purification tower's dosing parameters, the impact of waste gas emissions and odors on the surrounding community was effectively reduced.



Wastewater Management

JA Solar strictly complies with the *Law of the People's Republic of China on the Prevention and Control of Water Pollution* and other local laws and regulations. The Company has established policies and management measures such as the *Wastewater Treatment and Reuse System* to standardize the collection, treatment, discharge, and reuse processes of wastewater. We have built a comprehensive advanced treatment system for both industrial and domestic wastewater. This system includes quartz sand filters, ultrafiltration units, reverse osmosis devices, and pH adjustment equipment to effectively purify wastewater. All pollutants are tested before discharge to ensure compliance with relevant standards. In addition, by optimizing processes, the Company enhances wastewater reuse rates and reduces water resource waste.

Goal: Achieve a 100% compliant wastewater discharge rate

2024 Action: The 100% target has been successfully achieved, with no incidents of wastewater exceeding discharge standards or environmental pollution.

100%

Qujing Production Site Implemented Multiple Wastewater Recycling Measures

CASE

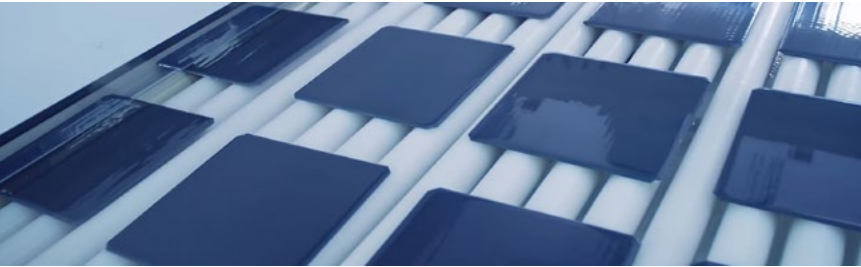
In 2024, Qujing Production Site actively carried out wastewater recycling through a series of measures including the reuse of machining wastewater, slicing wastewater, degluing machine wastewater, and rainwater collection for cooling towers. The total amount of recycled water at the production site reached 3,175,761 m³ for the year, effectively improving water resource utilization efficiency and reducing the environmental impact of sewage discharge.



Shijiazhuang Production Site Wastewater Recycling System

CASE

From the design stage, Shijiazhuang Production Site integrated the concepts of water conservation and wastewater reuse into its water supply and drainage system. The production site is equipped with advanced reclaimed water systems, including dilute acid and dilute alkali liquid reuse systems, slicing cleaning water reuse systems, and terminal reuse systems, enabling effective treatment and efficient recycling of wastewater. In 2024, the production site reduced wastewater discharge by 911,040 m³.



Wastewater Treatment Technology Training

CASE

In 2024, JA Solar invited professional instructors to conduct wastewater treatment technology training for production system supervisors and engineers, systematically explaining the theoretical framework and process principles of wastewater treatment, enhancing participants' systematic understanding of professional knowledge, and promoting the precise implementation of technology in real production environments to increase the effectiveness of corporate environmental governance.



Wastewater Management

The Company strictly complies with the laws and regulations of the operating location, such as the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste*, and has established policies and management measures such as the *Waste Classification and Disposal Standards*, the *Wastewater, Waste Gas and Solid Waste and Noise Management Procedures*, and the *Waste Materials of Management System*. We classify, collect, store, transport, and dispose of waste, and maintain a waste disposal ledger to record detailed information on the generation, emission, and treatment of waste. We focus on measures such as product design improvement, production process optimization, and enhanced raw material management to continuously reduce the amount of waste generated.

Waste Classification and Disposal Methods

Classification	Disposal Methods
General Waste	After centralized collection and classification, it is handed over to a qualified third party for landfill or recycling disposal.
Hazardous waste	We strictly comply with standards such as the <i>Standard for Pollution Control on Hazardous Waste Storage</i> , transfer and dispose of hazardous waste, and entrust qualified third-party suppliers for transfer, disposal, and recycling.

Annual Goal: The comprehensive conversion rate of waste at the production site is not less than 50%.

2024 Action: The solid waste conversion rate target was achieved. Each production site is actively carrying out the "Waste-free Factory Construction" project. Specifically, the waste conversion rates of the Yiwu Production Site and the Hefei Production Site exceeded 95%.

Key Performance



Total amount of hazardous waste

Unit: tonnes

17,708.96

Total amount of non-hazardous waste

Unit: tonnes

372,094.32

Recycled waste

Unit: tonnes

338,831.41

Main Waste	Action
Oil Hazardous Waste	The Xingtai Production Site has innovatively optimized the disposal path for oil hazardous waste, and changed the traditional incineration disposal to the R09 standardized recycling process, achieving the recycling of oil hazardous waste. In 2024, a total of 7,146 tonnes of hazardous waste were recycled.
Calcium Fluoride Sludge	<p>The Yangzhou Production Site introduced a third-party industrial solid waste treatment system to effectively process calcium fluoride sludge, reducing emissions to 30% based on the original process. After purification, the purity of calcium fluoride sludge can be increased to over 90%, allowing it to be reprocessed into hydrofluoric acid and used in the production manufacturing process.</p> <p>The Dongtai Production Site transformed the purification of calcium fluoride, separating high-purity calcium chloride, achieving a daily sludge reduction of 65 tonnes. This significantly lowered hazardous waste disposal costs and environmental risks.</p>
De-gelled Silicon Mud	The Qujing Production Site effectively recovered silicon powder from the wastewater generated in the slicing workshop through process transformation, achieving a recovery of approximately 25 tonnes of silicon powder.

Training on Hazardous Waste Management Capability at the Ordos Production Site

CASE

In December 2024, the Ordos Production Site conducted specialized capacity building for hazardous waste management. The Company enhances the accuracy of management personnel in identifying and classifying solid and hazardous waste through systematic training, while also standardizing the procedures for packaging and warehousing operations as well as the requirements for maintaining management records. After the training, an "immediate learning and application" conversion mechanism was established. The production site required each department to compile a local hazardous waste list based on the training content, and collaboratively complete the first batch of standardized hazardous waste storage, forming a management closed loop from knowledge transfer to practical implementation.

Biodiversity Conservation

2.2.6

Natural resources, precious and valuable, are the foundation for human survival. JA Solar actively responds to the United Nations *Convention on Biological Diversity*, the *Kunming-Montreal Global Biodiversity Framework*, and *China's National Biodiversity Conservation Strategy and Action Plan (2023-2030)*. In 2024, we formulated and published the *JA Solar Biodiversity Policy*, and actively explored and implemented various measures to reduce the impact of production and operations on the natural environment.

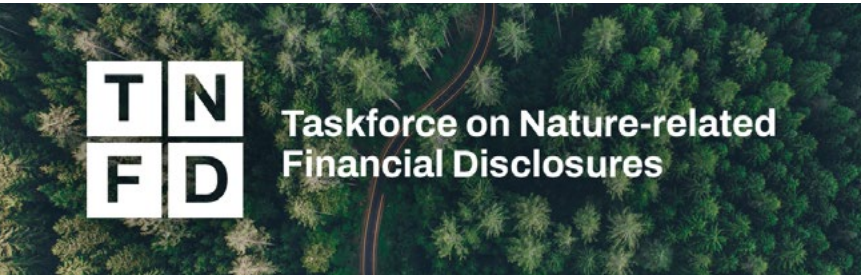
We pledge to: continuously improve biodiversity management performance and refrain from conducting operational activities near areas of significant global or national biodiversity. This policy applies to all subsidiaries and production sites of JA Solar worldwide and encourages suppliers, contractors, and partners to adopt or follow it.

In 2024, JA Solar became the first company in the photovoltaic industry to become a TNFD Adopter.

During the pre-construction, mid-construction, and post-construction phases of projects such as factories and power stations, JA Solar always places biodiversity protection in a prominent position, strictly adhering to relevant domestic and international laws and regulations as well as regional requirements, ensuring effective biodiversity protection throughout the entire project lifecycle.

Main Stage	Key Actions
Pre-construction	<ul style="list-style-type: none">Organize a professional team to conduct a comprehensive and in-depth environmental impact assessment of the projectUnderstand the potential impacts on biodiversity that the project may cause through scientific assessment methods and rigorous evaluation processes
Mid-construction	<ul style="list-style-type: none">Based on the preliminary evaluation results, develop targeted and practical response plans and solutionsUse environmentally friendly construction materials and processes to reduce pollutant emissions during construction and avoid damaging surrounding biological habitatsIn accordance with the requirements of the environmental assessment work, actively communicate with residents and seek comments and suggestions
Post-construction	<ul style="list-style-type: none">Continuously monitor the long-term impacts of the project on biodiversity and adjust and improve protection measures promptly based on actual conditionsEnsure that project operations do not have a adverse impact on biodiversity, achieving a harmonious coexistence between corporate development and ecological protection

In addition, JA Solar has released its first *Taskforce on Nature-related Financial Disclosures (TNFD) Report* based on the LEAP approach recommended by the TNFD. We conducted a systematic assessment of our production sites, power stations, and office premises to identify the impacts and dependencies of our operations on the ecological environment, thereby laying a solid foundation for formulating future response strategies. In the future, JA Solar will continue to explore innovative practices in biodiversity protection, providing valuable experience and data references for the industry, and making more systematic contributions to the protection of natural resources and biodiversity.



Fostering Green Culture

2.3



The Company highly values the building of a green culture, conveying green concepts, and creating a low-carbon atmosphere through various measures such as green office practices, environmental protection activities, and sustainable development training.

In terms of green office practices, the Company widely uses energy-saving lamps in office areas to reduce energy consumption and vigorously promotes paperless office practices by using electronic documents and emails for file transmission and approval, thereby reducing paper waste. Meanwhile, the Company encourages employees to adopt green commuting methods to reduce carbon emissions, creating a positive green office atmosphere. In addition, JA Solar actively formulates low-carbon office policies and sets goals for the transition of official vehicles to new energy sources. The newly revised vehicle policy for 2024 has clearly stated that newly purchased vehicles should be new energy vehicles.

Meanwhile, the Company has launched a series of employee environmental protection activities, including the Eco-Friendly Concept Walk and the Circular Market, to continuously raise employees' awareness and sense of responsibility for environmental protection. We have also added seating cushions representing the United Nations' 17 Sustainable Development Goals and posted sustainable development promotional posters in the tea and rest areas at headquarters. Additionally, we have upgraded some employee awards and gifts from the union to be made from plantable stickers and coffee grounds recycling bags, continuously conveying the concept of sustainable development to employees in their daily work. Furthermore, the Company actively conducts ESG-themed training, with each production site organizing and completing ESG training and learning, achieving a 100% coverage rate for management personnel.



Green Design and Operation of the Ordos Production Site

CASE

The Ordos Production Site fully considered green building and design concepts in the early design phase by using glass roofs in the office area to increase natural lighting, ensuring sufficient light in the office area while minimizing lighting energy consumption. In addition, the Ordos Production Site conveys the concept of sustainable operation by sending monthly ESG newsletters to all employees. The newsletter regularly summarizes the production site's ESG highlights, current policies, and ESG expertise, enhancing the ESG awareness of all staff comprehensively.



Creating a Circular Economy

2.4

The circular economy, as a new economic model aimed at achieving sustainable development, is an important pathway for companies and the entire industry to achieve sustainable growth. To vigorously develop the circular economy and accelerate the establishment of resource-saving, environmentally friendly, and green low-carbon transformation enterprises, JA Solar follows relevant domestic and international policies such as the *14th Five-Year Plan for Circular Economy Development* and the EU's *Circular Economy Action Plan*. Based on the "10R" principles of the circular economy, it has formulated the *JA Solar Circular Economy Strategy* dedicated to creating green products for the entire lifecycle. The ESG and Compliance Management Committee is responsible for overseeing the establishment and achievement of circular economy goals, providing recommendations on actions needed to achieve these goals, and reporting relevant matters to the Board of Directors to effectively promote the construction of a circular economy system.



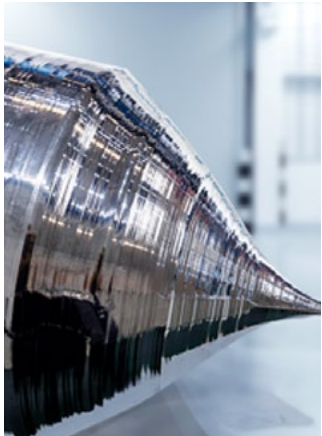
JA Solar comprehensively analyzes the environmental impact of product design, material selection, manufacturing, packaging, transportation, usage, and recycling throughout the entire lifecycle, and adopts various optimization approaches at different stages, setting specific indicators and goals for different products, and establishing a complete circular economy system.

Circular Economy Goals of JA Solar

2050	Achieve net zero GHG emissions (Scope 1, 2, and 3) Become a global leader in sustainable development
2030	Support sustainable investment and financing, with 100% of mainstream suppliers achieving sustainability-related certifications Establish a diverse, equitable, and inclusive management system Create green products for the entire lifecycle Reduce the total GHG emissions by 42% compared to 2023 (Scope 1 & Scope 2) Initially form production and circulation system for green, low-carbon, and circular development
2025	Reduce the thickness of n-type silicon wafers by 10% compared to 2020 Reduce the silver paste consumption per watt for n-type cells by 40% compared to 2020 Reduce the consumption per watt of frames and encapsulants in module auxiliary materials by 20% compared to 2020 Ensure that the usage ratio of recycled polycrystalline materials remain stable compared to 2020 and not be lower than 40%

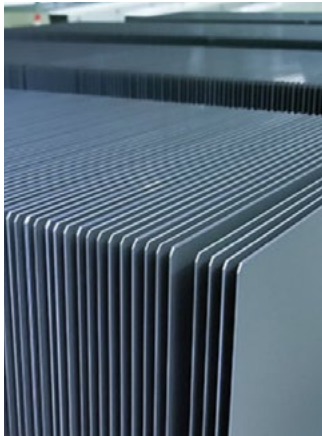
Main Links	Actions and Results
Design and Material Selection	<ul style="list-style-type: none">We fully consider product recyclability and reusability and adopt designs that are easy to disassemble and recycle.We prioritize environmentally friendly and low-carbon raw material suppliers, strengthen the sustainability management of raw materials, and promote the recycling of raw materials.We select green auxiliary materials such as lead-free solder strips, fluorine-free back panels, alcohol-free silicone, and low-acid adhesive films, and actively use recyclable and low-carbon materials.We introduced a new composite frame material made of fiberglass-reinforced polyurethane, which can be 100% recycled.
Production and Manufacturing	<ul style="list-style-type: none">We tackle green technology by adopting improved processes such as thinner adhesive films, non-aluminum frames, and alcohol-free sealing adhesives, continuously increasing the percentage of granular silicon input.We utilize innovative methods such as industrial robots, the Internet of Things, and AI to create smart and green factories.We reduce resource consumption and waste generation by implementing projects for the recycling and reuse of silicon rod edge scraps and argon gas.In the field of slicing technology, the use of thinner-diameter diamond wire and advanced thin-film cutting technology can significantly increase the output of silicon wafers under the same energy consumption, effectively reducing carbon emissions per silicon waferIn cell production, we effectively reduce silver paste consumption from 150 mg/ piece at the beginning of the year to 85 mg/piece by the end of the year, while also decreasing the use of organic solvents and glass powder.
Packaging	<ul style="list-style-type: none">We implement a circular packaging scheme, optimize cross-packaging, reduce unnecessary packaging, and strive to improve packaging and loading efficiency.We conduct verification for the removal of wooden edge protectors in domestic shipping packaging, establish management standards for the recycling and reuse of old packaging materials, and carry out dedicated recycling at the production site to minimize the use of packaging materials and reduce energy consumption during the packaging production process.We improve packaging solutions to increase the capacity of silicon wafer packaging boxes by 50%, thereby reducing the use of packaging materials.We use reusable packaging for the outer packaging of encapsulant films to replace traditional paper cartons.
Warehousing and Logistics	<ul style="list-style-type: none">We create a green, intelligent three-dimensional warehouse to promote real-time analysis and intelligent management of outbound, storage, and inventory information.We actively promote green logistics models such as combined rail and road transport, and water-road transport, and advance the "oil-to-electricity" project for in-warehouse transport forklifts to reduce carbon footprints in transportation.We explore the use of clean energy such as biomass fuels and methanol in logistics.
Use and Recycling	<ul style="list-style-type: none">We engage in strategic cooperation with PV CYCLE to promote the global recycling of discarded photovoltaic modules.We actively collaborate with research and academic institutions, and work with industry partners to establish the "Photovoltaic Recycling Industry Development Cooperation Center".We undertake multiple national-level recycling projects to ensure that products can be effectively recycled after their service life ends.We currently investing in a demonstration line project for the comprehensive utilization of discarded photovoltaic modules, conducting trial production verification tests for efficient disassembly of photovoltaic modules, and exploring solutions for module recycling and reuse in the industry.We registered for WEEE compliance in 17 Europe countries, with exceeding 7 GW in total power capacity and exceeding 37,000 tons in total weight.

Reducing Resource Consumption and Waste in All Manufacturing Processes



Crystal Pulling Process

- Material Recycling and Reuse
- Thermal Field and Process Optimization
- Silicon Rod Packaging
- Crucible Usage Optimization



Wafer Slicing Process

- Chemical and Consumable Consumption Reduction
- Silicon Wafer Thinning
- Line Loss Reduction
- Solar Wafer Packaging



Cell Process

- Improvement of Cell Efficiency
- Silver Consumption Reduction
- Process Energy Consumption Optimization
- Operation Innovation and Parameter Optimization



Module Process

- Increase in Product Qualification Rate
- Packaging Materials Optimization
- Maintenance Consumption Reduction

Energy Consumption and Equipment Management

- Standardized Management of Equipment Start-up and Shutdown
- Optimization of Equipment Maintenance
- Energy Saving in Laminating Machines
- Improvements in Welding Technology

Breakthrough in Low-carbon Application of Granular Silicon by JA Solar

CASE

JA Solar actively conducts process improvements and technological innovations in the application of granular silicon. By controlling the impurity content of granular silicon and optimizing the feeding methods, the percentage of granular silicon used by JA Solar increased from 10% to 40% in 2024.

10% → 40%



FASTER FOSTER
FAIRER FURTHER

FAIRER

Social Chapter

Unite to Build A Fair Society



JA Solar lays a solid foundation in personal value cultivation, stimulates vitality in industrial ecosystem co-construction, and conveys warmth in social welfare co-creation. The Company builds a fair and inclusive career development system, allowing every employee to thrive with the Company. We collaborate with industry partners to explore green transformation paths and promote common development and progress in the industry. We also focus on issues such as educational inclusivity and community empowerment, creating an environment for fair development, and allowing the sunshine of development to warm every dream-chasing figure.

ENSURING HUMAN-CENTERED OPERATIONS	3.1
SAFEGUARDING SAFETY AND HEALTH	3.2
LEADING INDUSTRY DEVELOPMENT	3.3
FULFILLING SOCIAL RESPONSIBILITY	3.4



Ensuring Human-centered Operations

3.1

JA Solar always regards employees as the core driving force and valuable asset for the Company's long-term development. In adherence to a people-centered approach, we always prioritize the health and safety of employees, safeguard their rights, and strive to build a diverse and equal workplace ecosystem. The Company remains committed to value co-creation as a key driver, continuously refining its human capital management system and embracing a people-oriented operational philosophy. We have formulated a series of management objectives aimed at strengthening human rights and related policies, empowering female employees, promoting anti-discrimination and anti-harassment practices, and enhancing overall employee well-being. At JA Solar, we provide employees with multi-dimensional development platforms to unleash innovation and boundless potential, fostering the alignment of personal fulfillment with corporate growth.

Protecting Employees' Rights and Interests

3.1.1

The Company's business development and innovation are inseparable from the support of talent cultivation. JA Solar strictly complies with the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Law of the People's Republic of China on Promotion of Employment*, and other relevant laws and regulations. We actively respond to international initiatives and standards such as the *Universal Declaration of Human Rights*, the *International Labour Organization Conventions*, and the *UN Guiding Principles on Business and Human Rights*, placing great importance on and respecting the human rights and lawful rights and interests of all employees.

Equal Employment

JA Solar is committed to creating an equal and inclusive work environment. The Company has established management systems such as the *JA Solar Code of Conduct* and the Headquarters Recruitment Management System, which strictly prohibit any discriminatory behavior based on race, ethnicity, religious beliefs, gender, age, sexual orientation, and other factors in all aspects of recruitment and employment, ensuring that employees enjoy an open, fair, and just workplace. Meanwhile, the Company promotes gender equality based on the *JA Solar Code of Conduct* and *JA Solar Diversity Equity & Inclusion Policy*, strictly prohibiting workplace discrimination and harassment, and actively conducting relevant training and awareness-raising activities. In 2024, JA Solar officially signed the *UN Women's Empowerment Principles (WEPs)*, transforming its commitment to gender equality into institutional guarantees and systematically enhancing the protection of female employees' rights and interests. Additionally, the Company has conducted leadership training activities specifically for female employees, focusing on topics such as travel safety for women. Furthermore, a total of 141 leadership-related training courses have been made available to all employees across the group, including full-time, part-time employees, and interns, with the coverage rate of 100%.

Moreover, the Company actively fosters a harmonious and friendly cooperative atmosphere and places a high priority on protecting the employment rights of people with disabilities. We strictly comply with relevant national laws and regulations to proactively recruit individuals with disabilities and to ensure they are capable of the work without having any potential harm to their personal health or body conditions. Equal employment opportunities and appropriate working conditions are provided to ensure a non-discriminatory, inclusive, and mutually respectful work environment.

During the reporting period, JA Solar had a total of 37,289 employees (including dispatched and part-time employees). There were 26,692 male employees and 10,597 female employees.

Total Number of Employees		37,289	
Including dispatched and part-time employees			
Female Employees		10,597	
Including dispatched and part-time employees			
Indicators		Unit	2024
Percentage of female employees	Percentage of female employees	%	28.42%
	Percentage of female managers	%	19.29%
	Female employees in senior management	%	8.20%
	Female employees in middle management	%	21.99%
	Female employees in junior management	%	17.96%
Other diversity indicators of employees	Minority employees	Person	1,857
	Disabled employees	Person	42
	Average employment years of male employees	Year	6
	Average employment years of female employees	Year	6
	Ratio of the average hourly wage of female employees to that of male employees	%	89%

Labor Rights

JA Solar actively practices the human rights policies outlined in the *International Labour Organization Conventions*. In accordance with international standards such as the *UN Guiding Principles on Business and Human Rights*, the *United Nations Global Compact*, and the core conventions of the International Labour Organization and in strict adherence to the laws and regulations of the operating locations, we published the *Modern Slavery Statement* and the *Annual Report on Measures to Prevent and Reduce the Risks of Forced Labor and Child Labor*. Meanwhile, the *JA Solar Human Rights Policy* established by the Company includes provisions for the protection of labor rights. In practice, we implement a multi-level review mechanism during the recruitment process to ensure compliance with labor regulations throughout the entire process. In 2024, JA Solar had no incidents of labor discrimination, harassment, child labor, or forced labor. JA Solar's Beijing headquarters has obtained SA 8000 Social Responsibility Management System certification.

Key principles of JA Solar's Human Rights Policy

- Prohibition of forced labor and child labor
- Non-discrimination principle
- Equal employment opportunities and working conditions
- Occupational health and safety
- Respect for freedom of association and collective bargaining
- Respect for the rights of local and indigenous communities
- Climate and environmental justice

JA Solar has established a systematic human rights due diligence management mechanism. We regularly conduct human rights risk screening and assessment covering the Company's operations and supply chain, focus on core areas such as child labor, equal employment, occupational health and safety, freedom of association, and forced labor, and formulate targeted risk control measures. In 2024, the Company used the Yangzhou and Fengxian Production Sites as pilot projects to optimize the investigation process through a scenario-based assessment model, further improving the human rights risk assessment system.

Content of Human Rights Risk Assessment

- Prohibition of forced labor, modern slavery, human trafficking
- Prohibition of using child labor
- Youth labor protection
- Equality, non-discrimination, diversity, and inclusion
- Anti-harassment, anti-intimidation, and anti-exploitation
- Equal work, pay, and opportunities for women
- Freedom of association and collective bargaining
- Decent wages, benefits, and working hours
- Privacy (including digital rights)
- Health and safety
- Environmental responsibility
- Access to grievance mechanisms and remedy
- Product quality and safety
- Conflict minerals

JA Solar's Human Rights Due Diligence Management Mechanism



Cultivating a Vibrant Talent Pool

3.1.2

JA Solar is building a systematic talent management system around the strategic goals of "globalization, digital intelligence, and ecologicalization", covering the entire chain of talent planning, identification, reserve, development, evaluation, and promotion, with a focus on cultivating a professional and international talent team. Adopting the "attracting talents externally and cultivating talents internally" talent strategy, the Company continuously upgrades its training system and develops empowerment projects that cover the entire career cycle for the enhancement of employee capabilities and in-depth alignment with organizational strategy.

Facing the common challenge of a shortage of global technical elites and international talent, the Company focuses on strengthening competitive advantages in the key links of "selection, training, utilization, and retention", conducting forward-looking job planning based on market trends, establishing a cross-departmental talent demand coordination mechanism, and building a dynamic talent database to accurately match strategic development needs. Meanwhile, we continuously improve talent introduction, training, motivation, and development channels, striving to build a high ground for industry talent.

Talent Attraction

In terms of talent recruitment, JA Solar continuously increases its talent introduction efforts through diversified channels to better meet the Company's future talent needs. In 2024, the Company established deep cooperative relationships with universities and conducted campus recruitment activities through special presentations and dual-selection job fairs to attract outstanding graduates. Meanwhile, to expand its global business layout, the Company actively explores overseas talent recruitment methods and channels and carries out overseas employer branding activities to attract industry talent from abroad.

During the reporting period, the total number of newly hired employees was

14,907

Indicators		Unit	2024
By Age	Employees 30 years of age and below	Person	9,240
	Employees between 31 and 50 years of age	Person	5,661
	Employees 51 years of age and above	Person	6
By Gender	Number of male employees newly hired	Person	11,303
	Number of female employees newly hired	Person	3,604
By Position	Senior management employees	Person	6
	Middle management employees	Person	81
	Junior management employees	Person	163
	Front-line employees	Person	14,657



Talent Development

Talent promotion and development is a key driving force for the sustainable development of enterprises. JA Solar has established a complete talent management mechanism, ensuring the Company's innovation capability and competitive advantage through employee empowerment training and incentive mechanisms.

Talent Management Mechanism

Talent Planning	<ul style="list-style-type: none">Develop a reasonable talent strategy based on the Company strategyOptimize the talent quality and ability training model and create a talent pool
Talent Identification and Reserve	<ul style="list-style-type: none">Unleash talent potential and carry out talent planning and positioningDetermine the talent development plan and strategy
Talent Cultivation	<ul style="list-style-type: none">Build a learning mapEstablish a mentoring and apprenticeship mechanismPropose a development plan
Tracking and Evaluation	<ul style="list-style-type: none">Regularly track and evaluate talent development to grasp the development situationActively perform two-way communication and optimize the standards based on the actual situation
Talent Promotion	<ul style="list-style-type: none">Make promotion decisions based on evaluation resultsContinuously optimize the Company's talent allocation

Performance Appraisal and Incentive Mechanism

JA Solar adheres to the principles of open, fair, and equitable promotion management, continuously improving the scientific promotion management process. The Company has formulated a *Performance Appraisal Management System* to standardize employee performance appraisal work. To effectively stimulate employee potential and vitality, JA Solar has established a multi-dimensional performance appraisal mechanism, which serves as an important basis for employee compensation, promotion, bonuses, and other work, covering all full-time employees at the group level. We conduct a comprehensive assessment of performance through multiple dimensions such as individual goals, team goals, and company goals, and gather feedback from various sources to regularly carry out performance evaluations for employees. On one hand, we regularly follow up and confirm the completion of employee performance goals, providing guidance to help employees identify problems promptly. On the other hand, after the assessment, we promptly provide feedback on performance to employees, achieving a feedback rate of 100%, and assist employees in formulating their next improvement goal plans. In 2024, for employees who have passed the probation assessment, JA Solar's regular performance evaluation work covered 100% of full-time employees and completed career development assessments.

We consistently improve the compensation structure and benefits system, establish a scientific compensation incentive system, and conduct internal compensation management based on this to

provide employees with competitive salaries, incentives and comprehensive benefits. The Company commits to not establishing different compensation and benefits standards based on factors such as race, ethnicity, religious beliefs, gender, age, or marital status, ensuring fairness and reasonableness in compensation incentives. We adopt a compensation model of "fixed remuneration + variable performance" and regularly conduct remuneration surveys. We analyze remuneration levels, adjustment frequencies, and ranges in the industry, and scientifically and reasonably adjust the remuneration level difference and bandwidth for various positions based on the current remuneration, employee performance, and capabilities, striving to strike a balance between market competitiveness and internal fairness.

To motivate employees, the Company continuously optimizes its incentive system by developing short-, medium-, and long-term incentive programs. We have also launched the JA Solar Academic Advancement Program to attract and retain outstanding talent while providing strong support for employees' career development. Meanwhile, in adherence to the *Management Regulations on Continuing Education for Onboard Employees* and the *Training Management System*, we support employees across the Group in gradually improving their educational qualifications, knowledge base, and professional competencies through flexible and diverse learning methods. Employees who obtain relevant academic degrees or certificates are granted corresponding rewards and support, i.e. tuition fee, bonus, etc.

Three Incentive Mechanisms

- Talent growth and development
- Talent achievement and value realization
- Talent respect and recognition

Four Incentive Modules

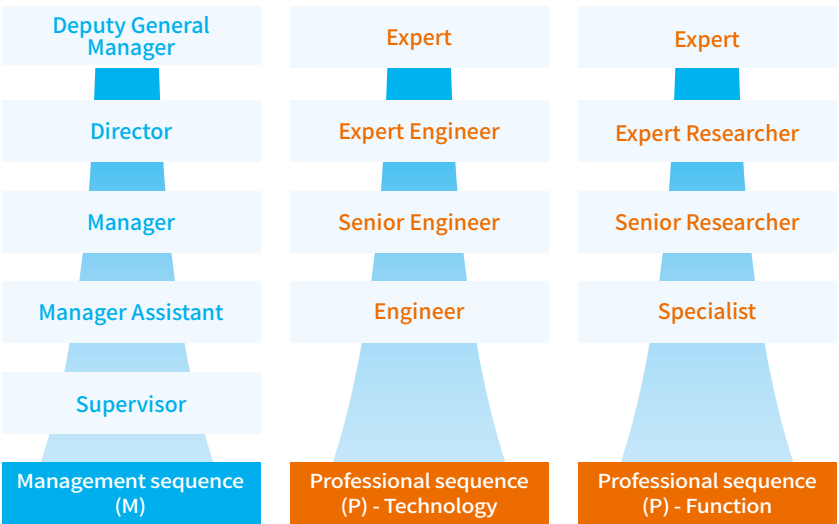
- Remuneration and equity incentives
- Patent and technology incentives
- Training and promotion incentives
- Other incentives: model evaluation, skill evaluation, etc.

3

4

Talent Promotion

The Company has established a "Post Competency Evaluation Model", empowering and evaluating employees from multiple dimensions such as management, professional, execution, and innovation capabilities, providing a basis for selecting and utilizing talent. JA Solar provides each employee with a comprehensive personalized growth system, designing three career development paths: management, technical, and functional paths, based on job requirements and employees' career goals, offering diverse career choices to motivate employees to realize their value in different fields and support their career development. In addition, the Company increases the intensity of internal job rotation and mobility and quickly cultivates new talents through job rotation and cross-departmental communication to meet the needs of business development.



Empowerment and Training

In 2024
JA Solar's employee training coverage rate was 100%.

100%

The average training duration per employee reached 33 hours.

33

JA Solar is committed to building a comprehensive and systematic talent development system to fully unleash employee potential and promote their career development. In accordance with the Headquarters Training Management System, the Company has developed a multi-dimensional talent development framework tailored to the characteristics of different roles, covering all levels of the management, professional, and operational tracks. This framework enables the orderly development of talent both horizontally and vertically. By providing employees with targeted development plans and empowerment support, the Company ensures access to precise and effective training resources at every stage of their career, empowering them to continuously grow and advance professionally.

The Company highly values enhancing the overall quality and business level of employees, continuously increasing training efforts, and adopting a combination of online and offline training, as well as internal and external training, to comprehensively improve employees' professional capabilities and levels. In addition, the Company has established the "Yidian Zhishi" online learning platform, providing employees with rich, efficient, and convenient online training resources.



Management Sequence

"JA Solar Master Action" Lecture Series

CASE

The Company offers diverse training opportunities to help managers enhance their leadership, management skills, and professional knowledge, thereby improving their leadership abilities and strategic thinking.

To promote the cultivation of strategic talent, the Company launched the "JA Solar Master Action" lecture series in 2024, focusing on the three major company strategies of "globalization, digital intelligence, and ecologicalization", bringing together executives and professional managers for multi-dimensional content sharing. Proceeding from industry trend analysis, organizational strategy implementation, and business collaborative innovation, we aim to strengthen strategic vision and holistic thinking, promote the deep integration of strategic awareness and business practice, and effectively enhance organizational efficiency.



Leadership Development Project

CASE

In 2024, JA Solar's Intelligent Energy systematically carried out a management empowerment project focusing on "Coaching Leadership Development" and "Dynamic Situational Management Capability Building". The project is divided into "Action Coaching" capability development and "Situational Leadership" practical study, systematically enhancing managers' ability to lead teams in the energy business transformation through multidimensional and diversified scenario simulations and management training, injecting sustainable leadership momentum into JA Solar's Intelligent Energy's business team.



Professional Sequence

Systematic Development of HR Department's Business Capabilities

CASE

JA Technology focuses on the professional capability building of business teams. In 2024, JA Solar's Intelligent Energy systematically conducted a multidimensional skills enhancement project, offering courses such as *TTT Training Theory Introduction*, *Special Course on Talent Development*, and *Labor Relations Knowledge Sharing*, to enhance the team's compliance management capabilities and systematically improve the full-chain professional capabilities of the human resources business team from talent selection and development to organizational management, providing talent support for strategy implementation.

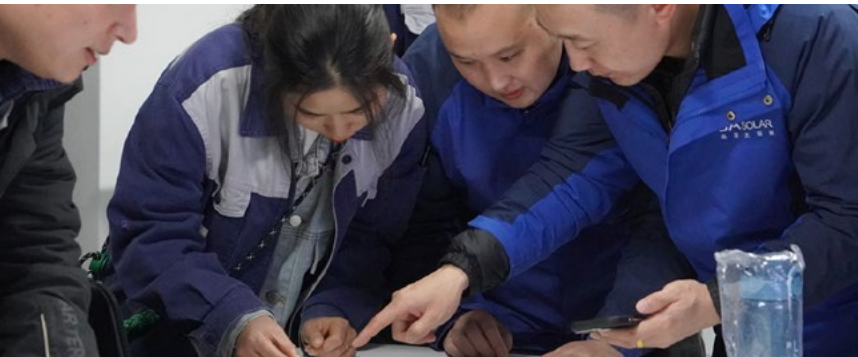


Operational Sequence

Dongtai Production Site Five-type Team Building Project

CASE

The Dongtai production site, with a focus on team management and technical improvement, carried out special activities for the construction of five types of teams, covering over 100 employees in the manufacturing department. The project, based on the actual production scenarios in the factory, utilized a training model that combined online training with offline instruction, systematically enhancing the standardized management level of teams while optimizing and empowering production management models.



University-Enterprise Cooperation

JA Solar is committed to building a talent ecosystem in the photovoltaic industry through university-enterprise cooperation and collaborating with universities to explore new talent training models and support high-quality industry development. In 2024, the Company engaged in deep integration of industry and education with several universities, including Huazhong University of Science and Technology, Xiamen University, Hefei University, and Hefei University of Technology, and established collaborations on multiple projects.

University-Enterprise Cooperation Project with Hefei University

CASE

In 2024, JA Solar and Hefei University jointly established a "College Student Internship and Employment Base" and completed the awarding ceremony. This cooperation marks a significant milestone in the precise alignment of "industry demand" and "education supply" in the field of new energy talent cultivation between the university and enterprise. It is an important step for both parties to explore new models of talent development together.



Forum on Corporate Culture and Integration of Industry and Education in the New Energy Sector

CASE

In 2024, Xingtai Polytechnic Institute of New Energy, established by JA Solar, initiated the "Forum on Corporate Culture and Integration of Industry and Education in the New Energy Sector". The college brought together enterprises, educational institutions, and industry experts and served as a platform for communication and mutual promotion, university-enterprise cooperation, and the integration of industry and education, helping to cultivate high-quality technical talent in the industry and boost high-quality development.



Building a Warm Workplace

3.1.3

Remaining "people-oriented", JA Solar focused on the actual issues faced by employees, actively addressed their needs, and implemented diverse care measures to effectively enhance employees' sense of happiness and belonging. The Company continuously establishes and improves the employee welfare system. We formulated regulations such as the *Attendance Management Regulations*, and provide nursing leave for all employees to meet the needs of those caring for elderly parents, allowing employees to handle family matters with peace of mind while balancing work and life. In addition, the Company dynamically optimizes the welfare structure based on employee feedback to comprehensively meet their needs.

In terms of employee physical and mental health care, the Company provides a series of support and protection measures for all employees, including health insurance, psychological counseling services, regular health check-ups, health lectures, and health initiatives, fully safeguarding employees' physical and mental well-being and enhancing their work happiness and satisfaction. Regarding corporate culture building, the Company regularly conducts team-building activities, employee birthday parties, and other events to enhance mutual understanding and cohesion among employees, creating a harmonious and friendly work atmosphere.

JA Solar regularly conducts holiday visits to employees and family visits to care about employees' family lives to elevate their sense of belonging. The Company has established a dedicated holiday care service for employees' children and continues to improve the rights protection system for female employees. We have set up maternity and nursing rooms and provide statutory benefits such as maternity leave, parental leave, and breastfeeding leave. In addition, we offer special allowances and organize exclusive activities for International Women's Day, effectively easing the parenting burden on female employees. Male employees are also entitled to paternity leave, enabling them to support their families during childbirth. Furthermore, the Company provides nursing leave for all employees to support those caring for elderly parents, helping them manage family responsibilities while maintaining a healthy work-life balance. At the same time, we are enhancing the support system for employees facing difficulties. Leveraging the trade union at each site, we continue to strengthen the employee caring system and regularly carry out assistance programs, effectively transforming corporate care into a tangible sense of security and well-being for our employees.



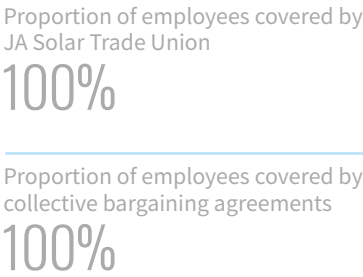
Care for Female Employees

CASE

On December 4, 2024, the Shijiazhuang production site organized a team of doctors from Taihang Health Center to provide free "two cancers" screening services for female employees, ensuring the health of female staff.



Offering Smooth Communication Channels



JA Solar respects the rights of all employees to freely associate and engage in collective bargaining, striving to build an open, transparent, and democratic communication mechanism. The Company has formulated a series of collective agreement documents, including the *Collective Agreement*, the *Collective Agreement for the Protection of the Rights and Interests of Female Employees*, and the *Collective Bargaining Agreement on Salaries*, and updates the collective bargaining contracts regularly each year to ensure that employees' rights and interests are fully protected and their demands are effectively addressed. Meanwhile, the Company has established trade unions at all its production sites, and the union regularly organizes employee representative meetings to ensure that employee representatives participate in company governance through institutional channels. In 2024, 100% of employees have been covered by JA Solar's trade union and are bound to collective agreements.

In terms of communication mechanism construction, the Company has built a multi-dimensional feedback network consisting of a "feedback mailbox + hotline + discussion", allowing employees to reflect their demands in real time through the union complaint platform or the employee relations coordination group. A dedicated group will implement full-process management of demands, including "acceptance - tracking - feedback", to ensure that employees' legal rights and interests are substantively protected, while keeping the information of complainants confidential, thus achieving efficient dispute resolution and normalizing democratic governance.

The Company conducts employee satisfaction surveys on an annual basis. In 2024, JA Solar's Intelligent Energy conducted an employee satisfaction survey to comprehensively collect employee feedback, achieving a satisfaction score of 93 out of 100. Through in-depth analysis, discussion, and summary of the survey results, the Company formulates and implements targeted improvement plans. In 2024, the Company focused on 6 key areas: optimizing the welfare system, strengthening career development paths, creating a good working environment, paying attention to employees' physical and mental health, and implementing effective incentive policies, to continuously enhance employee satisfaction.

Safeguarding Safety and Health

3.2

Upholding the EHS mission of "ensuring employee safety, promoting corporate development, and fulfilling social responsibility", JA Solar always prioritizes the health and safety of its employees and considers it an important part of the Company's sustainable development strategy. The Company enhances accident prevention and emergency response capabilities by establishing a comprehensive work safety management system, improving employees' occupational health and safety skills, and continuously building a safe and healthy production environment to protect employees' health and safety.

Implementing Safety Management

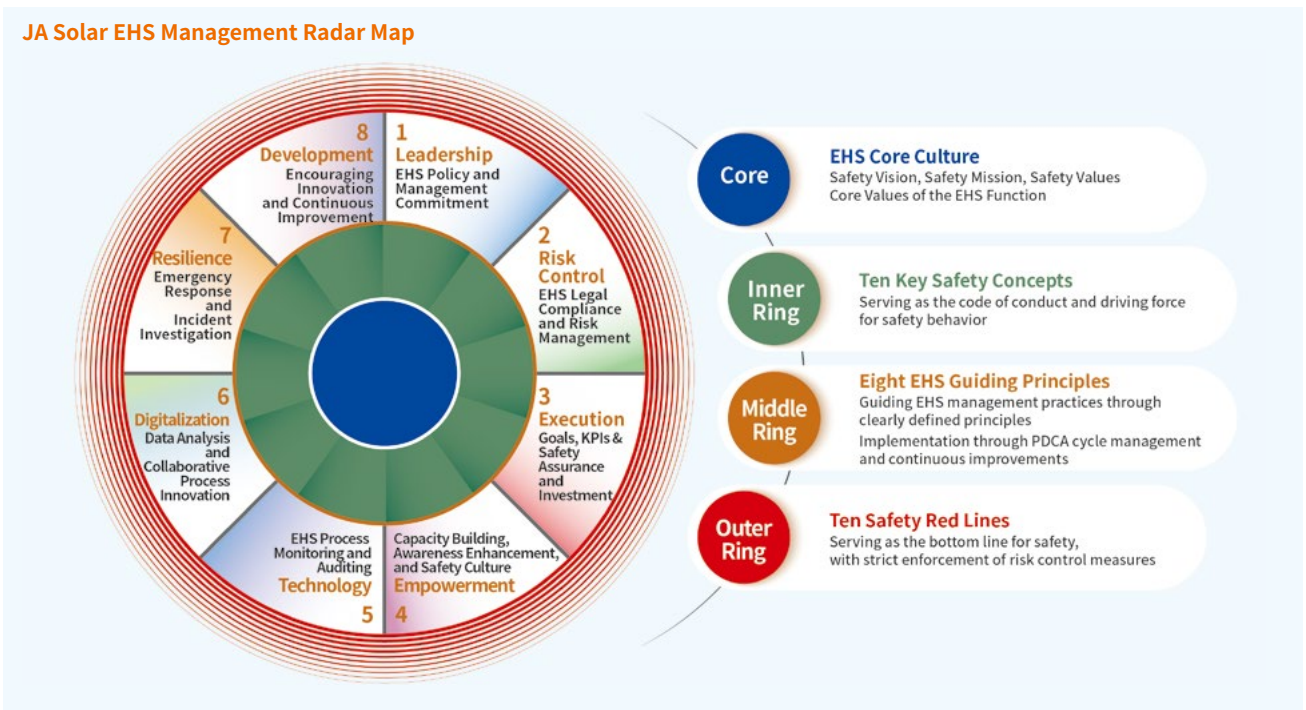
3.2.1

We highly value the occupational health and safety of our employees. In accordance with the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, *Law of the People's Republic of China on Work Safety*, *Regulations on Work-Related Injury Insurance of the People's Republic of China*, *Fire Protection Law of the People's Republic of China*, *Special Equipment Safety Law of the People's Republic of China*, and *Basic Rules for Standardization of Enterprise work safety*, the Company has developed a series of internal systems and procedural documents, including the *JA Solar Environmental Health and Safety Management Plan*, *JA Solar Environmental Health and Safety Policy Statement*, *EHS Management System Manual*, *EHS Accident Management Procedures*, and *Hazard Identification and Risk Evaluation Control Procedures*, to provide institutional support for the management of occupational health and safety.

In 2024, JA Solar established an innovative EHS management system centered on ten key safety concepts and eight guiding principles for EHS work. The system places a strong emphasis on EHS digitalization and talent development, implements the Plan-Do-Check-Act (PDCA) cycle to guide management practices, strictly enforces risk control measures, and strengthens the Company's resilience in the face of challenges.

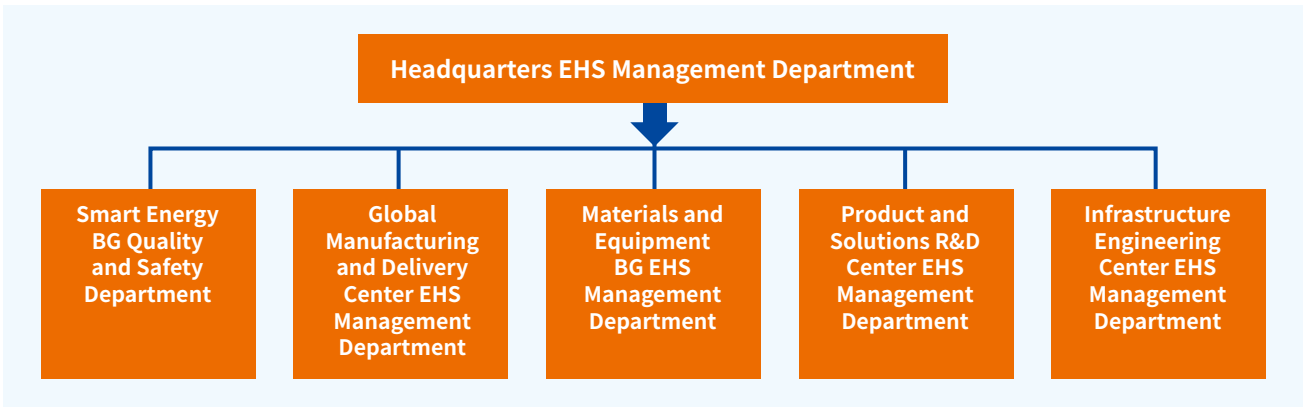
EHS Targets

1 Occupational diseases: 0	5 Rectification rate of accident hazards: 100%
2 Lost time injury frequency rate (LTIFR): <0.2705	6 Regular inspection rate of special equipment: 100%
3 Accountability for violations of the safety red lines: 100%	7 Safety education and training implementation rate: 100%
4 Major accident hazards: 0	8 Accident reporting rate: 100%



The Company headquarters and all production sites have established safety committees, equipped with dedicated safety management personnel and occupational health management personnel, responsible for building and continuously optimizing the occupational health and safety management system. JA Solar conducts annual process audits on its production sites according to work safety standards, urging the production sites to carry out hazard identification and improvement, and linking the audit results to the annual performance of production sites management personnel. Meanwhile, we continuously enhance the professional competence and capabilities of employees in EHS management positions.

In 2024, we provided exam support and certification rewards to employees who obtain relevant qualification certificates according to the Reward Management Measures for Employees Obtaining EHS Vocational Qualification Certificates at all levels. As of the end of the reporting period, the Company has a total of 130 full-time EHS personnel, all of whom have many years of professional experience in EHS and have obtained relevant training qualification certificates, providing support for enhancing the Company's occupational health and safety management capabilities.



2024 Goal: The certification rate for the ISO 45001 system across all production sites under JA Solar is 100 %. The coverage rate of work safety standardization is 100%. 2024 Action: The two 100% goals were achieved

100%

Key Performance



¹ The scope only covers main material production sites.



Preventing and Controlling Risks and Hazards

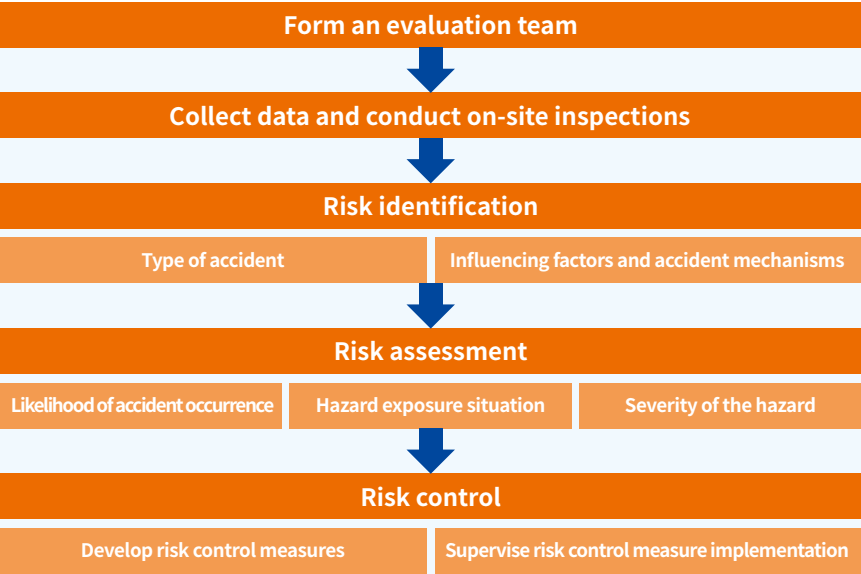
3.2.2

Risk Control

JA Solar establishes a work safety responsibility system, enhances the Company's safety risk prevention and control capabilities from multiple dimensions such as risk identification, emergency management, and awareness improvement, and implements work safety control measures at all levels.

JA Solar has established the *Procedures for Planning of Hazard Identification, Risk Evaluation, and Risk Control and the Information Communication, Consultation, and Participation Control Procedures* as part of a comprehensive risk management and hazard reporting system. Under these guidelines, a dual prevention mechanism for safety risk classification and hazard investigation and remediation has been established.

Each production site of the Company has formed a risk identification team to collect relevant information and conduct hazard identification. Meanwhile, the Company applies the Likelihood - Exposure - Consequence (LEC) method to scientifically assess and classify risks. Based on the assessment results, visual tools such as four-color risk map are developed to promptly and accurately communicate risk information to employees, ensuring they have a comprehensive understanding of workplace hazards. In addition, targeted risk control measures are formulated according to identified risks, including improving process design, providing personal protective equipment, training employees to enhance safety awareness, and establishing emergency response plans. To ensure the effectiveness of these control measures, the Company has implemented monitoring mechanisms and conducts both internal and external audits of the occupational health and safety management system, continuously improving the risk assessment and management process.



The Company strictly adheres to national laws, regulations, and standards, fully implementing the safety "three simultaneities" requirements in project construction (i.e., simultaneous design, construction, and use of safety facilities and main projects). In this process, the Company has commissioned a qualified technical consulting firm to prepare a comprehensive analysis report on work safety conditions and facilities, a dedicated design report for safety facilities, and a completion acceptance report for safety facilities, ensuring the effective implementation of safety facility design and construction, providing a solid guarantee for safe production at the site. Meanwhile, the Company continuously enhances the safety level of equipment and facilities by introducing Automated Guided Vehicles (AGVs), production robots, and automated production lines, gradually replacing manual operations and optimizing processes and workflows to effectively reduce labor intensity and safety risks.

Emergency Management

JA Solar has established the *Emergency Management System* and set up emergency management teams at each production site to standardize emergency management processes and measures, ensuring timely and effective handling of sudden work safety accidents. In 2024, all production sites of the Company actively carried out emergency drill activities to enhance employees' emergency response and handling capabilities.

Safety Training

JA Solar strives to build a safety culture among all employees and continuously conducts work safety training, including training on major accident hazard identification criteria for special equipment and specialized training on hazardous chemicals. Additionally, the Company fully utilizes existing online platforms to publish emergency guidance manuals such as the *EHS Emergency Manual* and *Safety Instructions* on DingTalk and the "Yidian Zhishi" platform, promoting work safety knowledge, creating a safety culture atmosphere, and reducing work safety risks.

Furthermore, the Company organized activities such as "Work Safety Month" to stimulate employees' enthusiasm for participating in work safety management.

The Qujing Production Site Conducted a Comprehensive Emergency Drill for "Work Safety Month"

CASE

In 2024, the Qujing Production Site established micro fire stations for JA Solar and Jinglong Electronics to improve the ability of production site to respond quickly to fires and other emergencies. Meanwhile, the Qujing Production Site participated in the comprehensive emergency drill activities for "Work Safety Month" in the Qujing Economic and Technological Development Zone in 2024, allowing employees to gain a more intuitive understanding of emergency response processes and helping to improve the internal emergency management system of the enterprise.



EHS Empowerment Training

CASE

In 2024, JA Solar initiated the "EHS Empowerment Training" capability-building project, with the first batch involving 37 employees. Through learning advanced safety management techniques and concepts from both domestic and international sources, and engaging in in-depth exchanges with outstanding enterprises, a shared learning network for EHS partners was established to explore best practices and cooperation and develop a unique EHS management path with JA Solar's characteristics.



Ningjin Production Site
Conducts Safety Training

CASE

In 2024, Ningjin Production Site organized a series of safety training sessions on chemical safety, confined spaces, fire safety, and more, totaling 328 sessions as planned. The number of participants reached 72,345, with a total of 86,706 hours of training. These activities helped to raise the employees' safety awareness and improve the overall safety management of the production site.



Special Safety Activities
for New Employees at Yiwu
Production Site

CASE

In October 2024, Yiwu Production Site planned a dedicated safety campaign for new employees at the module plant. The campaign included activities such as safety training evaluations for work teams, pre-shift safety briefings, and safety knowledge assessments for new hires, attracting wide participation among newly onboarded staff. This initiative raised the work safety awareness of new employees and laid a foundation for the Company's work safety.



Ordos Production Site
Organized Fire Safety Month
Knowledge and Skills
Competition

CASE

In December 2024, Ordos Production Site organized a Fire Safety Month Knowledge and Skills Competition. Through quizzes, rapid-fire questions, skill competitions, and fun activities, the event increased employees' attention and emphasis on fire safety and strengthened their fire safety skills.



Guaranteeing
Occupational Health
3.2.3

The Company strictly complies with the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases* and applicable laws and regulations in overseas operating locations. Based on the *Occupational Safety and Health and Working Environment Convention* published by the International Labour Organization (ILO), we continuously strengthen the protection of employees' occupational health and improve the occupational health management system. Under the guidance of the *Occupational Hygiene Management System, Occupational Health and Safety Management Manual*, and *Occupational Health Management Procedures*, JA Solar diligently implements the prevention and control of occupational disease hazards to safeguard employees' occupational health.

The EHS teams at JA Solar's headquarters and various production sites organize at least one occupational health and safety risk identification exercise each year and conduct risk assessments and classification control. The identified "major risks" and "significant risks" are included in the *Unacceptable Risk List and Control Plan*, with strict control and follow-up reviews implemented. Except for "negligible risks", all other risks will be further controlled to reduce the level of occupational health risks.

The Company and its production sites regularly conduct testing for occupational disease hazard factors to timely understand the degree of hazards in the workplace. For identified occupational disease hazard factors, each production site posts announcements regarding these hazards and provides employees with personal protective equipment that meets job requirements. Meanwhile, the Company installs facilities such as exhaust fans, silencers, and dust collectors to ensure the occupational health and safety of employees during their work processes.

The Company strictly implements the occupational health examination system, standardizing pre-employment, on-the-job,

and off-the-job health checks, and establishes comprehensive occupational health records for each employee to achieve full-process tracking and documentation of health management. JA Solar has established a comprehensive occupational health and safety training system. Employees must undergo three levels of safety education and occupational health training before employment, and can only start work after passing the examination. After joining the Company, employees will receive regular and irregular on-the-job education and training, covering occupational health management training, occupational disease prevention training, and heatstroke prevention training. In addition, the Company also pays close attention to employees' mental health. In 2024, we conducted psychological health training such as stress and emotion management to safeguard employees' physical and mental well-being.

In addition, the Company organized occupational health activities, including Occupational Disease Prevention Law Promotion Week, creating a positive atmosphere that cares for and pays attention to occupational health.

Health Knowledge Lecture
at Qujing Production Site

CASE

In 2024, Qujing Production Site organized health knowledge training for all employees and created study groups based on specific knowledge. The training content included infectious diseases, chronic disease prevention, psychological health lectures, and smoking control health education, with a total of over 840 participants both online and offline.



Comprehensive Health Training
at Baotou Production Site

CASE

In June 2024, the Baotou Production Site conducted comprehensive occupational health training for all employees, emphasizing job-specific health and safety precautions tailored to different roles. The training aimed to enhance employees' awareness of occupational health and their capacity for self-protection.



Occupational Health
Professional Work Guidance
Manual Training at Ordos
Production Site

CASE

Ordos Production Site refined its needs based on local policies and business scenarios, clarified processes, and developed a normative guidance manual covering core sections such as "hazard factor identification, health monitoring, and education and training". This provides guidance and a basis for all departments in occupational health management, achieving a dual reinforcement of source control and process supervision over occupational disease hazards, thereby more effectively protecting employees' health.

Leading Industry Development

3.3

JA Solar harnesses its development experience and advantages to actively promote activities such as standard formulation, international initiatives, industry communication, and technical exchanges within industry associations, continuously deepening external cooperation and enhancing industry influence.

Protecting Employees' Rights and Interests

3.3.1

JA Solar actively participates in various standard organizations and industry alliances, engaging in the formulation and promotion of national and industry photovoltaic standards. In 2024, leveraging the strengths of its integrated industrial chain, the company conducted standard research across various specialized fields. It successfully released the group standard Method for *Measuring Square Resistance of Photovoltaic Cells Diffusion Layer* and took the lead in drafting 10 other group standards,¹ consistently providing professional guidance for the development of the photovoltaic industry.



JA Solar Was Awarded the "Outstanding Contribution Award for Standards"

CASE

At the "2024 Standard Seminar and Technical Exchange Conference", JA Solar received the "Outstanding Contribution Award for Standards" from the CSTM Solar Photovoltaic System Application Standardization Technical Committee, highlighting JA Solar's significant contributions to promoting standardization in the photovoltaic industry.



JA Solar Participated in the ATPV Technology Forum and Three Group Standards Were Approved

CASE

During the reporting period, JA Solar actively participated in the 2024 "ATPV Advanced Photovoltaic Technology and Materials Forum" autumn meeting hosted by ATPV, where industry representatives discussed the latest developments in photovoltaic technology, industry standards, and future trends. At this meeting, JA Solar provided an in-depth interpretation of the technological innovations and breakthroughs behind the full-scenario applications of photovoltaic modules. Additionally, during the concurrently held "2024 Annual Meeting and Standard Seminar" of CSTM, three group standard proposals from JA Solar were approved, further contributing to the standardization efforts in the photovoltaic industry.



¹ The 10 standards include three standards to be released, five standards to be reviewed and two standards in the process of being established.

No.	Standard Plan No.	Standard Name	Standard Type	Type	Chief Editing Unit
1	In application	Photovoltaic Devices. Part 13: Electroluminescence of Photovoltaic Modules	National Standard	Chief Editor	JA Solar Technology Yangzhou Co., Ltd.
2	T/CPIA 0100-2024	Method for Measuring Square Resistance of Photovoltaic Cells Diffusion Layer	Group Standard	Chief Editor	JA Solar Technology Co., Ltd.
3	CSTM LX 0322 01462—2024	UV-Induced Degradation Test Methods for Crystalline Silicon Photovoltaic (PV) Cells	Group Standard	Chief Editor	JA Solar Technology Yangzhou Co., Ltd.
4	2024004-CPIA	Color Sorting Method for Photovoltaic Cells Based on Automated Optical Inspection(AOI)	Group Standard	Chief Editor	JA Solar Technology Yangzhou Co., Ltd.
5	2024005-CPIA	Test Method for Contact Resistivity of Crystalline Silicon Photovoltaic Cell Metal Electrode and Welding Transfer Length Method (TLM)	Group Standard	Chief Editor	JA Solar (Yangzhou) Solar Technology Co., Ltd.
6	CSTM LX 0322 01556—2024	Recycling Classification Standards for Crystalline Silicon Photovoltaic Modules	Group Standard	Chief Editor	JA Solar Technology Co., Ltd.
7	CSTM LX 0322 01544—2024	Polyurethane Water-resistant Sealant for Photovoltaic Modules	Group Standard	Chief Editor	JA Solar Technology Yangzhou Co., Ltd.
8	CSTM LX 0322 01533—2024	Glass for Photovoltaic Modules – Part 2: Back Plate Augmented Reflective Coated Glass for Double-Glass Module	Group Standard	Chief Editor	JA Solar Technology Co., Ltd.
9	CSTM LX 0322 01532—2024	Thermal Shock Test Method for Photovoltaic Modules	Group Standard	Chief Editor	JA Solar Technology Yangzhou Co., Ltd.
10	CSTM-SQ-2024-01285	Acetic Acid Immersion Test Method for Crystalline Silicon Photovoltaic Cells	Group Standard	Chief Editor	JA Solar Technology Yangzhou Co., Ltd.
11	CSTM LX 0322 01617—2024	Photovoltaic Encapsulant Film Acid Value Test - Potentiometric Titration	Group Standard	Chief Editor	JA Solar Technology Wuxi Co., Ltd.
12	CSTM-SQ-2024-01324	Optical Performance Testing Methods for Photovoltaic Encapsulation and Light Conversion Films	Group Standard	Chief Editor	JA Solar Technology Wuxi Co., Ltd.

Facilitating Industry Exchange and Cooperation

3.3.2

JA Solar deeply integrates into the industry ecosystem, actively participates in industry associations and industrial alliance activities, and builds a collaborative network with peers, academic experts, and government departments. Currently, strategic partnerships have been established with authoritative organizations and institutions both domestically and internationally, such as the China Chamber of International Commerce, China Photovoltaic Industry Association, International Renewable Energy Solution (INES), and International Investment Alliance for Renewable Energy (IIARE), forming a global industrial collaboration matrix to jointly promote sustainable development in the industry.

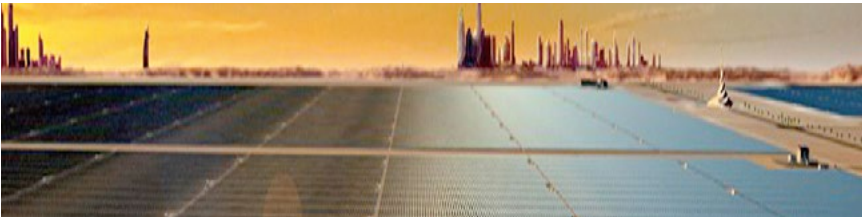
In 2024, JA Solar participated in a series of industry activities, including the International Manufacturing Digital Innovation Summit, the 20th China SoG Silicon and PV Power Conference (CSPV), the High-efficiency Cell Technology and Equipment - TOPCon and Heterojunction Forum, and the ATPV, actively spreading the voice of JA Solar across multiple venues. Meanwhile, the Company adopts a proactive and open attitude, working with peers and other stakeholders to jointly build a high-quality industrial chain system, sharing cutting-edge technologies and industry development trends.

JA Solar Officially Joined the IRENA Coalition for Action

CASE



In February 2025, JA Solar officially joined the IRENA Coalition for Action. The coalition actively promotes dialogue among government and non-government stakeholders, accelerates the energy transition based on renewable energy, and enhances the share of renewable energy in the global energy structure. The Company will leverage this international platform to engage in broader communication and cooperation with outstanding global partners, sharing technologies and experiences, and jointly exploring new directions for renewable energy development.



JA Solar Officially Joined the Global Solar Council

CASE



In January 2025, JA Solar officially joined the Global Solar Council (GSC), which has actively integrated resources from various parties since its establishment, vigorously promoting the widespread application and industrial development of solar energy globally. JA Solar occupies an important position in the photovoltaic field. After joining this platform, we will leverage this opportunity to closely communicate and share experiences with global partners, contributing to the development of the solar energy industry and supporting the global energy transition to new heights.



JA Solar Attended the 2024 Photovoltaic Industry Annual Conference

CASE

From December 4 to 6, JA Solar actively participated in the "2024 Photovoltaic Industry Annual Conference" co-hosted by the China Photovoltaic Industry Association and the Yibin Municipal People's Government. This conference focused on the prospects of new energy development under the new power system, the future opportunities and challenges of the photovoltaic industry, and macro analysis and discussions on the development status of various links in the photovoltaic supply chain and application end, promoting high-quality development in the industry.



During the reporting period, JA Solar was actively engaged on multiple international stages, deeply participating in a series of important international forum activities. With a positive and open mindset, we collaborated with domestic and international partners to jointly build a high-quality industrial chain system, demonstrating JA Solar's influence in the industry and its determination to actively promote international cooperation.

The Third Belt and Road Energy Ministerial Conference

CASE

From October 23 to 24, 2024, JA Solar participated in the Third Belt and Road Energy Ministerial Conference with representatives from 27 countries, research institutions, and international organizations to promote the establishment of energy cooperation partnerships under the "Belt and Road" initiative. The Company presented innovative insights around the theme of "Building a Talent Cooperation System and Advancing South-South Cooperation to a New Level", calling on stakeholders to take on the mission of "Developing solar power to benefit the planet", jointly utilizing multilateral mechanisms to build regional cooperation platforms, establish a renewable energy industry supply chain, and promote the application of clean energy, bringing strong momentum to global development.



2024 Solar PV & Energy Storage World Expo and New Energy Storage Industry Development Conference

CASE

On August 8, 2024, JA Solar participated in the "2024 Solar PV & Energy Storage World Expo and New Energy Storage Industry Development Conference", delivering a keynote speech titled "Advancing with Light, Integrating PV and Storage - A New Generation of Solar-Storage Solutions Leading an Era of Transformation" and engaging in in-depth discussions with attendees on high-quality innovation and deep integration of new light storage technologies, while sharing JA Solar's "one-stop" integrated PV and storage solution.



APEC CEO Summit

CASE



On November 14-15, 2024, JA Solar attended the APEC CEO Summit with over a thousand government officials and business representatives from various APEC economies, participating in the 2024 "APEC Sustainable Business Night" event. Together with numerous business leaders, they discussed trends and challenges in sustainable development, actively seeking mutually beneficial cooperation models to contribute to economic development and green transformation in the Asia-Pacific region.



2024 Summit of the Forum on China-Africa Cooperation and the Eighth Conference of Chinese and African Entrepreneurs

CASE

On September 5-6, 2024, JA Solar was invited to participate as a representative of new energy entrepreneurs at the 2024 Summit of the Forum on China-Africa Cooperation and the 8th China-Africa Entrepreneurs Conference. JA Solar, along with leaders from China and over 50 African countries, discussed the current status, challenges, and future directions of photovoltaic development in Africa with a focus on cooperation in fields such as new energy, contributing to local energy supply, and economic development.

Fulfilling Social Responsibility3.4

"Developing solar power to benefit the planet" is the mission that JA Solar has always adhered to. Adhering to the "Every Corner" public welfare concept, JA Solar integrates social welfare into its corporate DNA, building a matrix of public welfare projects around "Every Person", "Every Creature", "Every Oasis", "Every Centigrade", and "Every Desert", investing in various topics such as biodiversity, zero-carbon factories, and ecological governance over the long term. In 2024, guided by the "Every Corner" public welfare concept, we actively integrated social resources to expand our public welfare footprint across multiple dimensions such as rural development, community care, and inclusive education. We are dedicated to delivering the warmth of clean energy across geographical boundaries and cultural differences, and fulfilling our commitment to "We Care Every Corner of the World".

In 2024, our total public welfare donations reached RMB 858,101.

858,101

Rural Development3.4.1

JA Solar leverages its platform and resources to illuminate the future of rural areas. During the reporting period, we continuously promoted the "Three Major Projects for the Benefit of the People", injecting hope into every corner of the countryside. We took practical actions to support China's rural development strategy, and foster a new future.

In 2024, JA Solar's total investment in the "Three Major Projects for the Benefit of the People" reached RMB 699,090.

699,090

100 Hope Primary Schools Donation Project

1

10,000 Needy Students Financial Support Project

2

Brightness Project for Poor Cataract Patients

3

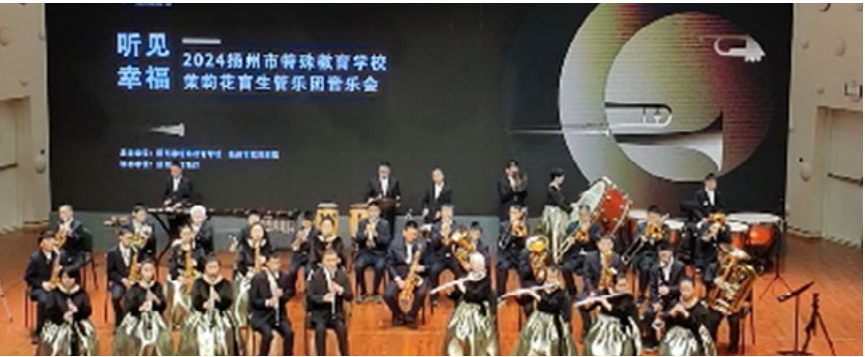
JA Solar continues to promote the "100 Hope Primary Schools Donation Project", helping to optimize the allocation of educational resources. In 2024, we invested a total of RMB 400,000 in special funds for upgrading school facilities and improving the teaching environment according to a donation plan for two rural primary schools in Hebei Province. We have effectively narrowed the gap in the allocation of educational resources between urban and rural areas and allowed quality educational resources to benefit more rural students. With concrete actions, we contribute to local community development.

JA Solar adheres to the philosophy of "Compassion as the Foundation, Good Deeds for the People", and carries out the "Brightness Project for Poor Cataract Patients" charity project with the aim of "Restoring Sight to One Person, Bringing Happiness to One Family". During the reporting period, the Company funded the surgical treatment of 80 cataract patients, with a total donation amount of RMB 98,880, effectively alleviating the medical burden on cataract patients from difficult families in Ningjin County, and bringing care, warmth, and light to them.

The "10,000 Needy Students Financial Support Project" aims to support outstanding students from impoverished backgrounds through various forms, encouraging them to strive for excellence. In 2024, JA Solar provided a special scholarship of RMB 5,000 each to 29 academically excellent students from difficult backgrounds in Ningjin County, Hebei Province, who graduated from 2021 to 2023, helping rural students complete their studies and injecting new knowledge-based vitality into rural development.

Harmonious Community3.4.2

JA Solar upholds the philosophy of harmonious integration of corporate development and social responsibility. We promote community development projects in various operational areas, practice the "Every Corner" public welfare concept with practical actions, and continue to build a symbiotic network of production operations and community development.



2024 Annual Public Welfare and Charity Donation Actions (Part)

Public Welfare Sector	Operation Area	Activity Name	Donation
Social Development	Baotou, Inner Mongolia	One-day Donation for Love	In response to the 2024 "One-day Donation for Love" event organized by the CPC Qingshan District Committee, Baotou Production Site called on all employees to donate and collected a total of RMB 50,344.96, which was fully donated to the Red Cross Society of Qingshan District.
	Fengxian, Shanghai	The Beloved Under the Blue Sky	Fengxian Production Site donated RMB 5,000 to the Shanghai Fengpu Industrial Park to contribute to the modernization of Fengxian New Town.
	Gaoyou, Jiangsu	Gaoyou Charity Donation Activity	To practice the new era values of "dedication, friendship, mutual assistance, and progress", Gaoyou Production Site participated multiple times in charity donation activities in Gaoyou City during the reporting period in response to the 2024 "5·19 Charity One-day Donation Campaign" by donating RMB 30,000 to the Gaoyou Charity Federation, as well as donating RMB 20,000 to the Gaoyou Economic Development Zone Charity Association for the 2024 "5·19 Charity One-day Donation Campaign", supporting the development of the urban charity.
		2024 "Jiangsu Women and Children's Welfare Foundation" 99 Charity Day Donation	To actively promote the high-quality development of women and children's causes in Jiangsu Province, Gaoyou Production Site donated RMB 10,000 in response to the 99 Charity Day activity organized by the Jiangsu Women and Children's Welfare Foundation.
Assisting Those in Need	Yangzhou, Jiangsu	Yangzhou "519 Charity One-day Donation"	Initiated by the JA Solar Headquarters Foundation and in accordance with the unified deployment of the Yangzhou Municipal People's Government, a total donation of RMB 30,000 was made to the Yangzhou Charity Federation to support the assistance of disadvantaged groups in the city and contribute to the charitable cause in Yangzhou, boosting the city's development.
		Yangzhou Special Education School Instrument Donation Project	To fulfill social responsibility and care for local vulnerable groups, instruments worth RMB 15,860 were donated to blind children at the Yangzhou Special Education School, supporting the successful organization of the Jasmine Blind Students' Wind Band concert.
	Baotou, Inner Mongolia	Baotou JA Solar "In Gratitude We Meet, In Warmth We Journey" Charity Fundraising	The Company actively carried out charitable activities by visiting children's welfare institutions. This event attracted 1,303 employees to participate in the fundraising, with a total donation amount reaching RMB 23,146.82, used for the daily expenses and construction costs of the Baotou Children's Welfare Institute.
	Ningjin, Hebei	Donation for the Disabled Dream Realization Inspirational Art Performance	In response to the call of the Ningjin County Charity Federation and the Ningjin County Disabled Persons' Federation, Ningjin JA Solar donated RMB 20,600 to support the development of cultural and artistic endeavors for people with disabilities.

Inclusive Education

3.4.3

During the reporting period, JA Solar launched multiple educational assistance projects both domestically and internationally and promoted the establishment of several educational programs and special funds in collaboration with various foundations and international universities. We expanded the talent cultivation phase from children and adolescents to students from around the world, breaking geographical limitations and providing various forms of support to illuminate every corner of knowledge.

2024 Progress of the Educational Assistance Projects Supported by JA Solar and All Production Sites

Baotou Sports Development Project	<ul style="list-style-type: none">During the reporting period, to support sports development and care for youth growth, the Baotou Production Site donated RMB 30,000 to the Beijing Charity Association and the Baotou Qingshan District Education Foundation in Inner Mongolia for the development of youth sports education.
Solar Scholarship Program	<ul style="list-style-type: none">Xingtai Jinglong PV Materials Co., Ltd. granted a Solar Scholarship of RMB 5,000 to the children of employees who meet the relevant criteria of the Solar Scholarship funding program.The trade union of JA Solar (Xingtai) Solar Co., Ltd. granted a Sunshine Scholarship of RMB 10,000 to the children of employees who meet the relevant criteria of the Sunshine Scholarship funding program.
Yangzhou Bali Center Primary School "JA Solar Teaching Assistance Scholarship" Project	<ul style="list-style-type: none">The Yangzhou Production Site established the "JA Solar Teaching Assistance Scholarship" project at Yangzhou Bali Center Primary School, awarding scholarships to outstanding teachers and students for several consecutive years, supporting the steady development of local education.
Enabling a Scientific Reading Dream for Rural Children in Collaboration with Lingshan Library Program	<ul style="list-style-type: none">JA Solar, together with the Wuxi Lingshan Charity Foundation Library Project Special Fund, donated small seed science reading packages to 201 children in regions such as Bayannur in Inner Mongolia, Zhengding in Shijiazhuang, Hebei Province, and Lu'an in Anhui Province, helping children better learn scientific knowledge and expand their cognitive horizons.



Xingtai Polytechnic Institute of New Energy Was Officially Established

CASE

To promote inclusive education and coordinated industrial development, JA Solar invested in the construction of Hebei Province's first higher vocational college in the new energy sector - Xingtai Polytechnic Institute of New Energy. In July 2024, Xingtai Polytechnic Institute of New Energy was officially established, focusing on the entire new energy industry chain and dedicated to cultivating high-quality technical and skilled talents. The college has signed cooperation agreements with several well-known enterprises to promote the deep integration of industry and education and train outstanding talents that meet the needs of industrial transformation and upgrading.



As a leading enterprise in the photovoltaic field, JA Solar continues to deepen cooperation with domestic and international public welfare organizations and international universities. Leveraging its business and resource advantages, we provide global education development solutions and accelerate the development and innovation of the global new energy industry.

Overseas Talent Cultivation Program (Part)

Green Education Project in Ban Na District, Thailand	<ul style="list-style-type: none">JA Solar, in collaboration with Huawei, UNESCO, and the Thai Ministry of Education, jointly launched a green education project aimed at local residents and students at the Learning Promotion Center in Ban Na District, Nakhon Nayok Province, Thailand. JA Solar donated high-efficiency n-type photovoltaic modules DeepBlue 4.0 Pro to the school, deeply participating in the construction of the green school education system, and provided training on the application and management of green energy for teachers and students, helping them understand the practical application value of clean energy. The project aims to cultivate a new generation of talent with both green skills and digital capabilities by providing clean energy solutions and digital education opportunities to 11 schools and community centers.
Vietnam Electric Power University Practical Training Course Project	<ul style="list-style-type: none">A team of experts from JA Solar was invited to participate in a practical training course on the Management, Design, Construction, and Operation of Rooftop Solar Power Systems organized by INPOS, a well-known renewable energy technology company in Vietnam, providing students with insights into the production performance technology of photovoltaic modules. This training attracted over a hundred students from top universities in Vietnam, actively promoting the popularization of photovoltaic technology education and innovative applications.
Vietnam Electric Power University Mobile Photovoltaic System Project	<ul style="list-style-type: none">JA Solar closely collaborated with INPOS and Vietnam Electric Power University, donating mobile photovoltaic systems to the university during the reporting period, providing strong support for the university's research and teaching, and further deepening and expanding the tripartite cooperative relationship to jointly contribute to the cultivation of professionals in the photovoltaic field and the advancement of industry technology.



Overseas Assistance

3.4.4

JA Solar pays attention to every corner of the world and eyes on diverse public welfare areas such as overseas emergency rescue, medical care, and community development. While promoting its operations, the Company collaborates with non-profit organizations both domestically and internationally, focusing on the social needs of the operational areas. Through donations of materials and funds, we aid in solving local social issues, promote energy equity, and spread awareness of low-carbon practices.

Eid al-Fitr Donation Activity in the Middle East

CASE

In response to the United Nations Sustainable Development Goals and to demonstrate humanitarian care for countries in the Belt and Road Initiative, JA Solar, in collaboration with its strategic partner Power n Sun (PNS), initiated an Eid al-Fitr donation activity, providing Iftar meals to impoverished workers at power stations in the UAE, conveying love and care, and embodying the spirit of charity through practical actions.



Jubilee Church Project in Australia

CASE

JA Solar actively promotes sustainable development in communities both domestically and internationally. During the reporting period, the Company participated in the renewable energy transformation project of Jubilee Church, established in 1898, collaborating with various stakeholders in the community to explore advanced solutions that integrate history, community, and sustainable development. By partnering with Yello Energy Group to install a 25-kilowatt photovoltaic system for Jubilee Church, the annual energy costs were significantly reduced by 72%, allowing more funds to be allocated to important community services. This project aims to support local sustainable development practices while setting a benchmark for community service, empowering more local organizations worldwide to take on environmental responsibilities.



Public Welfare Care Activities for Children with Special Vascular Malformations in South Korea

CASE

On May 4-5, 2024, the JA Solar Korea team participated in a team activity aimed at children with special vascular malformations in South Korea. During the event, a family camping activity was held at the Goesan Natural Park in North Chungcheong Province, and we donated 3 million Korean won in financial aid to the organization, demonstrating care for sick children through practical actions.



By actively participating in disaster relief public welfare activities, JA Solar supports disaster rescue and post-disaster reconstruction efforts in affected areas around the world and fulfills its corporate social responsibility. Meanwhile, timely material and financial assistance is provided to affected communities to help restore production and daily life in disaster-stricken areas, building a more resilient disaster response system.

Emergency Support for Flooding in Brazil

CASE

In May 2024, flooding occurred in the southern Brazilian state of Rio Grande do Sul. JA Solar urgently donated drinking water and transported it to the affected areas, addressing the drinking water needs of the disaster-stricken population. Moreover, the Company collaborated with partners, distributors, and other stakeholders in the solar market to assist, showcasing JA Solar's international perspective and commitment.



Ecological Protection

3.4.5

Ecological protection is a core proposition for the harmonious coexistence of enterprises and nature. Guided by the concept of sustainable development, JA Solar collaborates with multiple parties to participate in ecological protection actions. We conduct systematic environmental restoration in key ecological areas through technological innovation and resource integration for the harmonious development of humans and nature.

JA Solar Joined the "100 Million Suosuo" Project

CASE

Upholding the public welfare commitment of "We Care Every Corner of the World", JA Solar joined the SEE Foundation's "100 Million Suosuo" desertification prevention project. In 2024, the Company continued to promote the project by planting a total of 30,000 sand willows in the desertified area of Ordos, Inner Mongolia. Through scientific planting and meticulous care, we endeavor to restore desert vegetation, build ecological barriers, and help improve the local ecological environment.



FASTER FOSTER
FAIRER FURTHER

FURTHER

Governance Chapter

Solid Governance Ensures Long-Term Prosperity



Adhering to the business philosophy of robust growth for sustained profitability, JA Solar continuously improves corporate governance to protect investors' rights and interests. We keep refining our modern corporate governance structure and embed the concept of sustainability into responsible operations for long-term stability. In daily operations, through multi-faceted measures such as compliant operations, risk management, adherence to business ethics, intellectual property protection, and improvement of data security, the Company takes on responsibility and collaborates with partners for a society featuring lasting and shared prosperity.

SOLIDIFYING GOVERNANCE FOUNDATIONS	4.1
COMPLIANT AND ROBUST OPERATIONS	4.2
INTELLECTUAL PROPERTY PROTECTION	4.3
SAFEGUARDING INFORMATION SECURITY	4.4



Solidifying Governance Foundations

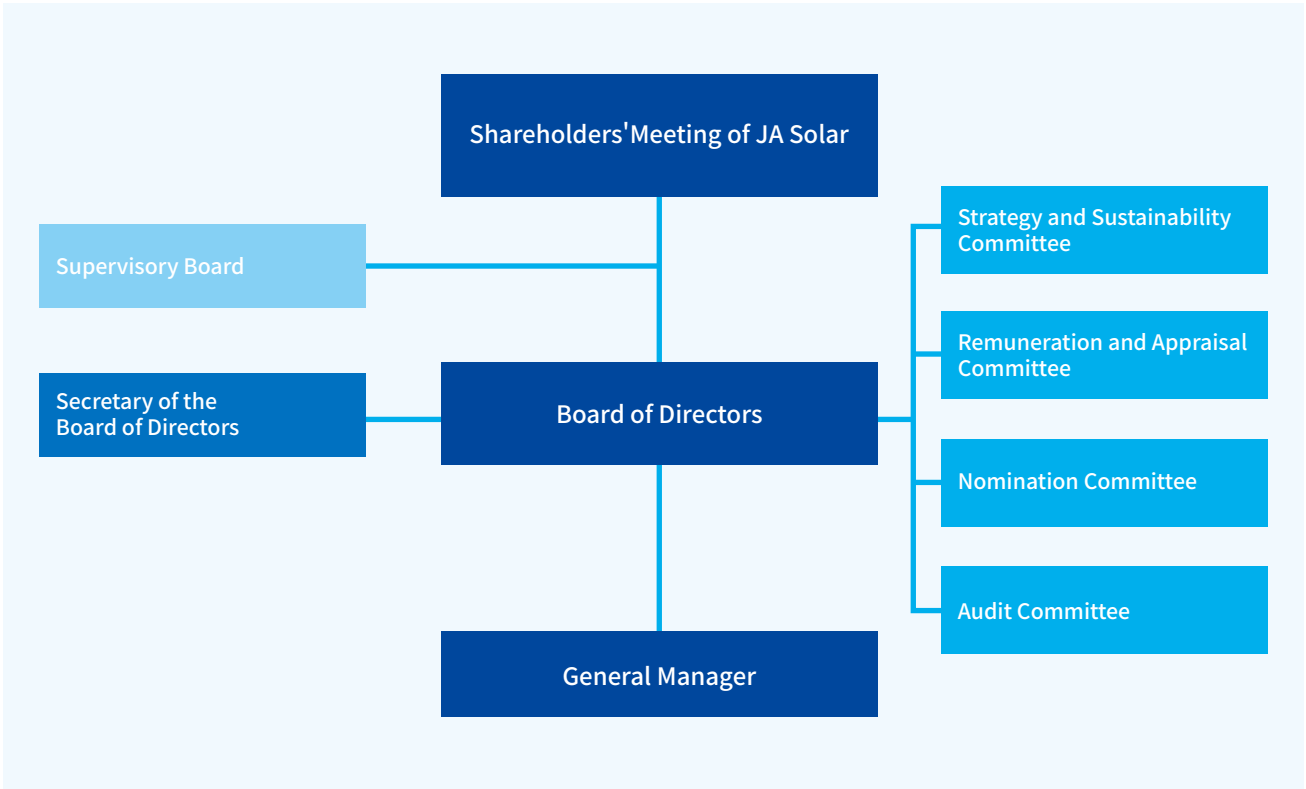
4.1

A lasting prosperity is a common pursuit for enterprises, and the long-term development of a company relies on a scientific, standardized, efficient, and clearly defined corporate governance system. JA Solar continuously optimizes corporate governance, values the diversification and professionalism of the Board of Directors, deepens communication and interaction with investors, and boosts sustainable development through high-quality corporate governance.

Corporate Governance Structure

4.1.1

JA Solar strictly complies with a series of laws and regulations, including the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, the *Guidelines for Corporate Governance for Listed Companies*, and the *Rules Governing the Listing of Shares on Shenzhen Stock Exchange*. The Company has established a governance structure with the shareholders' meeting as the highest authority, the Board of Directors as the decision-making core, the Board of Supervisors as the supervisory body, and the management as the executive body, forming a corporate governance system that is well-structured, sound in mechanism, complete in system, and sustainable in development.



Strategy and Sustainability Committee	■ Mainly responsible for researching and providing recommendations on the Company's long-term development strategy, major investment decisions, sustainable development, and ESG initiatives
Remuneration and Appraisal Committee	■ Mainly responsible for formulating assessment standards for the Company's directors and senior management and conducting assessments, formulating and reviewing the remuneration policies and plans for directors and senior executives, and accountable to the Board of Directors
Nomination Committee	■ Mainly responsible for researching and proposing candidates, conditions, standards, and procedures for the Company's directors and senior management
Audit Committee	■ Accountable to the Board of Directors, and mainly responsible for communication, supervision, and verification of internal and external audits

Diverse Board Composition

As of the end of reporting period

3 female directors on the Board, accounting for over

30%

JA Solar has established the *Rules of Procedure for the Board of Directors*, *Rules of Procedure for the Board of Supervisors*, and related internal control systems to effectively regulate the selection, assessment, and dismissal processes for directors, supervisors, and senior management, and ensure that the Board of Directors and the Board of Supervisors fully play their roles in major decision-making and operational management.

The Company has established a Board structure that includes both internal and external members. Board members are nominated by the Company's Board of Directors and elected by the shareholders' meeting, with a term of three years. Directors may be re-elected upon the expiration of their term. The Company's Board of Directors carries out its work in accordance with the *Self-regulatory Guideline No. 1 for Companies Listed on the Shenzhen Stock Exchange -the Standardized Operation of Companies Listed on the Main Board*, *Rules of Procedure for the Board of Directors*, *Articles of Association*, and other regulations, and implements the resolutions passed by the shareholders' meeting to ensure the Company's continuous, healthy, and stable development. In addition, to fully leverage the role of independent directors in the governance of listed companies, the Company has also established the *Independent Director System* and the *Working Rules for Special Meetings of Independent Directors*, among other regulations, to ensure the rights of independent directors to participate in corporate governance and supervision. Currently, among the 9 directors on the Company's Board, there are 3 independent directors, accounting for 33% of the total members.

The Company values the diversity and professionalism of the Board of Directors, gathering members with diverse backgrounds and professional experiences. In 2024, JA Solar released the *Principles and Implementation of Diversity of Board Members*. The Company adheres to the principle of employing people based on merit and refers to a series of diversity indicators in the selection of Board members, including but not limited to educational background, professional experience, service tenure, gender, age, nationality, cultural background, and other factors. The Board members are selected based on strategic development and business needs, with efforts made to maintain a balanced structure of professional expertise and competencies within the Board.

As of the end of the reporting period, the Board of Directors consists of 9 members, including 3 female directors, accounting for over 30% of the total; there are 6 directors with a master's or higher degree. The backgrounds of the Board members cover various fields such as renewable energy applications, sustainable development, climate change, legal compliance, business strategy, financial management, and risk management, laying a comprehensive and solid management foundation for the Company's long-term development.

Name	Position	Gender	Nationality	Position	Term
Jin Baofang	Chairman and General Manager	Male	China		6 Years
Yang Aiqing	Director Deputy General Manager	Male	China	Member of the Strategy and Sustainability Committee, Member of the Nomination Committee	3 Years
Jin Junhui	Director	Female	China	Member of the Strategy and Sustainability Committee	3 Years
Tao Ran	Director	Male	China	Member of the Strategy and Sustainability Committee, Member of the Remuneration and Appraisal Committee	6 Years
Cao Yangfeng	Director	Male	China	Member of the Strategy and Sustainability Committee	6 Years
Jia Shaohua	Director	Male	China	Member of the Audit Committee	3 Years
Zhao Yuwen	Independent Director	Male	China	Member of the Strategy and Sustainability Committee, Nomination Committee, Audit Committee, and Remuneration and Appraisal Committee	6 Years
Zhang Miao	Independent Director	Female	China	Member of the Strategy and Sustainability Committee, Nomination Committee, and Remuneration and Appraisal Committee	6 Years
Qin Xiaolu	Independent Director	Female	China	Member of the Audit Committee	6 Years

Board and Executive Remuneration Management

The Company has established a comprehensive performance evaluation mechanism for the Board of Directors. The performance of Board members is regularly assessed through a scientific evaluation system and continuous improvement measures to ensure the effectiveness of Board governance. The Board of Directors or its subordinate Remuneration and Appraisal Committee is responsible for regularly organizing and conducting performance evaluations for the Company's directors and senior management. The Company strictly follows regulations such as the *Working Rules for the Remuneration and Appraisal Committee* to evaluate the performance of directors and senior management. In addition, to further standardize the behavior of senior management, the Company has established an incentive mechanism that links senior management remuneration to company performance and individual achievements, ensuring that senior management complies with the *Company Law of the People's Republic of China* and fulfills their responsibilities according to the *Articles of Association* and relevant company systems. During the reporting period, the Company conducted performance evaluations for Board members, covering 100% of the Board members.

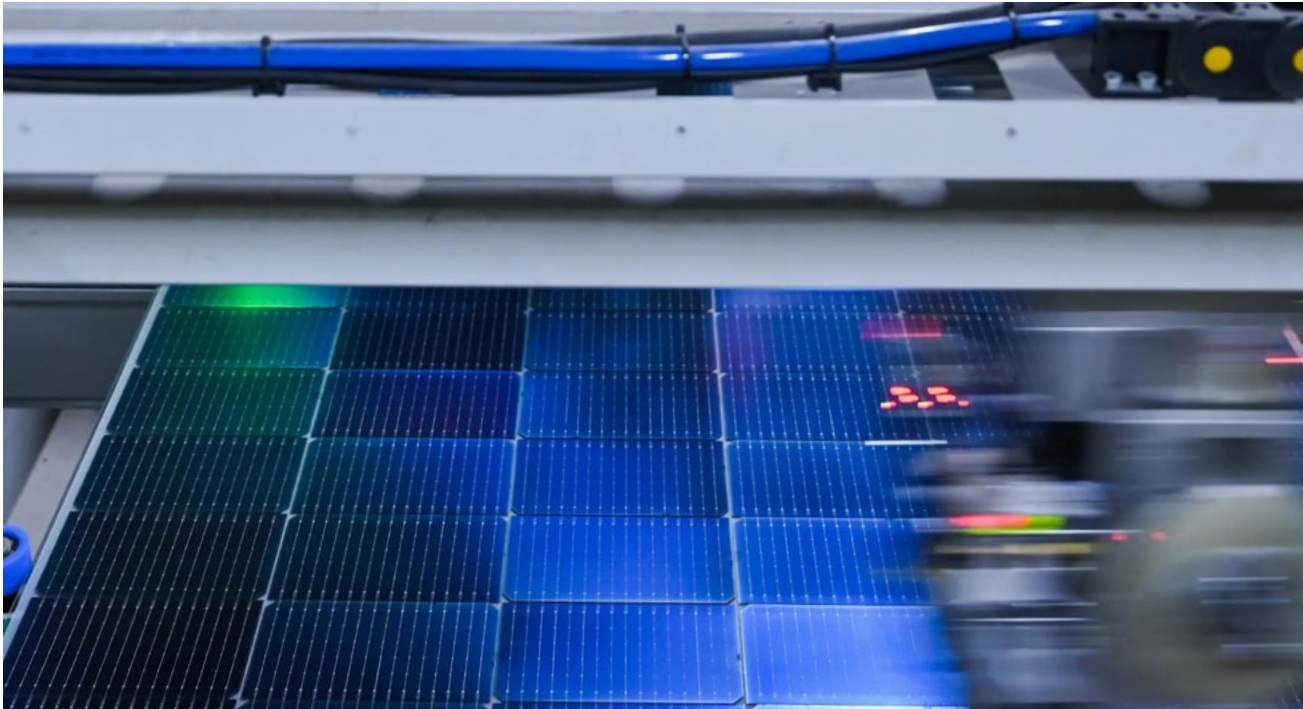
Board of Supervisors Management

In addition, the Company's Board of Supervisors consists of 3 supervisors, including 1 employee representative supervisor, and the number and composition of supervisors comply with legal and regulatory requirements. The Company's Board of Supervisors diligently fulfills its responsibilities in accordance with the *Rules of Procedure for the Board of Supervisors*. In 2024, we held 7 Board of Supervisors meetings to effectively supervise and provide opinions on significant matters such as the Company's regular financial status reports, profit distribution plans, and the use of raised funds.

■ In 2024, the Audit Committee held 6 meetings, while the Strategy and Sustainability Committee, Audit Committee, and Remuneration and Appraisal each held 4 meetings respectively. The Company held 3 extraordinary general meetings and 1 annual general meeting. The Board of Directors held 16 meetings.

Main Honors

■ In 2024, the Company received the "Outstanding Practice Case of the Board of Directors", "5A Evaluation of the Board Secretary's Performance", and "Best Practice Case of the Board Office" awarded by the China Association of Public Companies.



Investor Rights and Interests Protection

4.1.2

JA Solar strictly conducts investor relations management in accordance with the *Company Law of the People's Republic of China*, *Securities Law of the People's Republic of China*, *Guidelines for Investor Relations Management of Listed Companies*, and relevant provisions of the *Articles of Association*. The Company has established systems such as the *Management System for Investor Relations*, the *Management System for Information Disclosure*, and the *Management System for Reception of Specific Visitors* to protect investors' rights to be informed and to participate in significant matters of the Company, ensuring that disclosed information is true, accurate, complete, timely, fair, and easy to understand, and effectively safeguarding the legitimate rights and interests of investors.

JA Solar actively promotes investor communication through a diversified communication channel that combines online and offline methods. We listen to investors' demands and suggestions and provide equal opportunities for investors to access information. During the reporting period, the Company fulfilled its information disclosure obligations in accordance with the law and successfully prepared and disclosed 4 periodic reports and 120 interim reports, enhancing the openness and transparency of the Company's operations, and providing a reliable basis for investor decision-making.

Investor Communication Methods

Online Channels	New Media Platforms	■ We present the latest updates to a wide range of investors in a timely and comprehensive manner through the Company's official WeChat Account, video accounts, and other new media matrix platforms.
	Official Website Column	■ We release the latest updates through the "Investor Relations" column on the official website and optimize information categorization to help shareholders and investors better understand the Company's operations.
	Interaction Easy (Shenzhen Stock Exchange)	■ We assign dedicated personnel to manage the Shenzhen Stock Exchange interaction platform of the exchange, using simple and understandable language to address questions promptly. During the reporting period, the response rate on the Shenzhen Stock Exchange interaction platform reached 100%.
	Investor Hotline	■ We arrange dedicated personnel to answer the investor hotline, patiently respond to investor inquiries, and for questions that cannot be answered on the spot, follow up and resolve them afterward, providing timely feedback to investors.
Offline channels	Performance Briefing Sessions, On-site Research, On-site Visits, Collective Reception Days	■ The Company holds performance briefing sessions and provides activities such as on-site research and on-site visits to allow investors and shareholders to fully understand the Company's production and operational status.

■ In 2024, the Company held a total of 5 performance briefing sessions and responded to over 157 questions on the online interaction platform with institutions and investors participating in investor communication activities over 1,000 times and 2,000 times, respectively.

JA Solar focuses on the protection and management of the rights and interests of small and medium shareholders. The Company strictly fulfills its responsibilities in accordance with relevant laws and regulations, ensuring that small and medium investors enjoy equal status and full rights to exercise their powers. We respect and safeguard the rights of all shareholders as owners of the Company, and convene and hold shareholders' meetings in strict accordance with the requirements of the China Securities Regulatory Commission and the stock exchange, with lawyers present to witness. The shareholders' meeting adopts both on-site and online voting methods to facilitate small and medium shareholders' participation in voting, fully ensuring their involvement and voting rights on significant matters related to the Company.

Main Honors

■ JA Solar was awarded the title of "Best Listed Company in Investor Relations Management" by the Weekly on Stocks.

Tax Transparency

4.1.3

The Company's tax policy is aligned with its corporate strategy and ESG goals, ensuring compliance with tax laws in all jurisdictions where economic activities and value creation occur, thereby contributing to social and economic development while achieving sustainable growth. Our tax management approach aligns with the needs and long-term interests of all stakeholders, including but not limited to the government, shareholders, employees, and investment institutions.

Tax Governance Structure

- **Tax governance structure:** The Company has established a Tax Governance Committee composed of senior executives and business departments.
- **Global tax compliance team:** The Company has set up dedicated tax teams responsible for local tax law enforcement, reporting, and compliance review in each operating country and region. We also regularly work with external tax advisors to update our tax strategy.
- **Internal control mechanism:** We established a standardized manual for tax processes, covering transaction structure design, invoice management, cross-border payments, and other aspects.

Our commitment¹

Principles of Tax Planning

1

- The Company conducts tax planning management in accordance with the law for corporate income tax and other indirect taxes. Tax compliance means that the Company pays taxes on time and in full, including disclosing all relevant facts to tax authorities when necessary. The Company neither tolerates nor encourages any tax evasion or tax avoidance behavior.
- The Company designs its tax structure based on reasonable business purposes and the substance of its operations, avoiding tax structures that lack commercial substance. We formulate and implement legal, compliant, and transparent tax strategies and policies based on their economic substance.
 - The Company does not engage in aggressive tax arrangements and will not transfer the value created to tax havens. The Company takes measures to ensure that the taxes paid are consistent with the profit-generating activities and avoids using tax structures that lack commercial substance, prohibiting the use of shell companies, fictitious transactions, or the abuse of tax treaties.

Special Management Principles for Cross-Border Tax

3

- **Permanent Establishment (PE) management:** We strictly assess and manage remote sales teams or digital services in accordance with OECD guidelines on taxation in the digital economy.
- **Digital Services Tax (DST) management:** For regions such as the EU that impose digital taxes, we separately account for relevant income and assess the risk of double taxation.

Key Performance

- In 2024, JA Solar paid taxes of RMB 1.8 billion.

1.8

Compliance Requirements

- **Paying taxes according to the law:** We comply with the relevant tax laws, tax practices, operational norms, and international tax regulations (such as the OECD's BEPS project and BEPS 2.0 global minimum tax rules) of the country or region where the business operates, uphold high professional standards, and ensure legal compliance by accurately and timely declaring and paying all taxes and disclosing relevant information in accordance with local regulations.
- **Transfer pricing:** The Company establishes transfer pricing policies based on the arm's length principle. To meet internationally recognized transfer pricing standards and rules.

Tax Risk Management Principles

2

- **Risk identification and assessment:** We regularly conduct tax health checks to identify high-risk areas (such as cross-border related party transactions and permanent establishment determinations), and use a tax risk matrix to quantify risk levels (e.g., likelihood × impact).
- **Dispute prevention and response:** The Company maintains open and honest communication with tax authorities and tax policymakers, providing transparent and accessible information to various tax authorities, and consulting transfer pricing rules for related party transactions in advance to facilitate their understanding of our tax strategy and fundamental business model, which serves as guidance for the Company's daily tax operations.
- **Tax information disclosure:** The Company reports and discloses its tax status in accordance with applicable domestic and international tax regulations, maintaining transparency in its operations and tax status.
- The Company complies with the General Anti-Avoidance Rules (GAAR) of various countries and does not use confidential jurisdictions or so-called "tax havens" to evade taxes.

Tax Policy Implementation and Supervision

4

- **Training and communication:** Regular global tax compliance training is provided to ensure employees understand the latest regulations (such as the progress of BEPS 2.0 implementation).
- **Audit and improvement:** The internal risk control department conducts routine reviews of tax policy implementation, while external consultants assess compliance effectiveness.



¹ This commitment covers all business units, subsidiaries and all entities controlled by JA Solar Group.

Compliant and Stable Operations

4.2

Long-term Risk Management

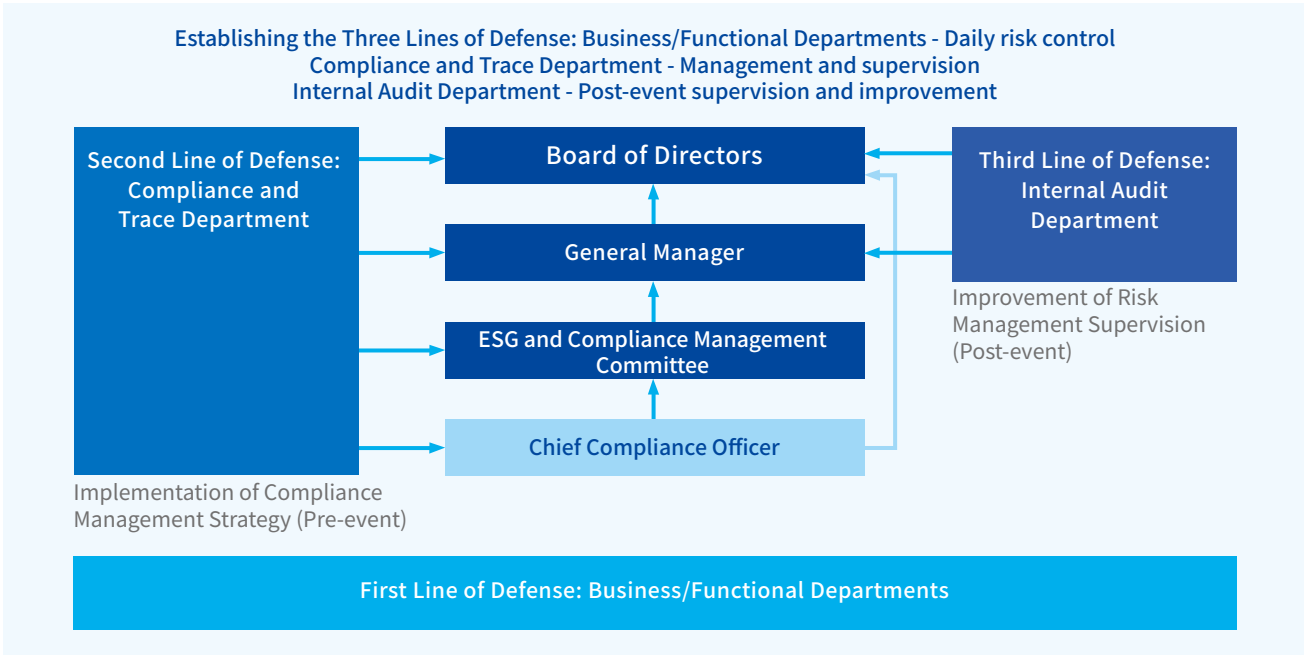
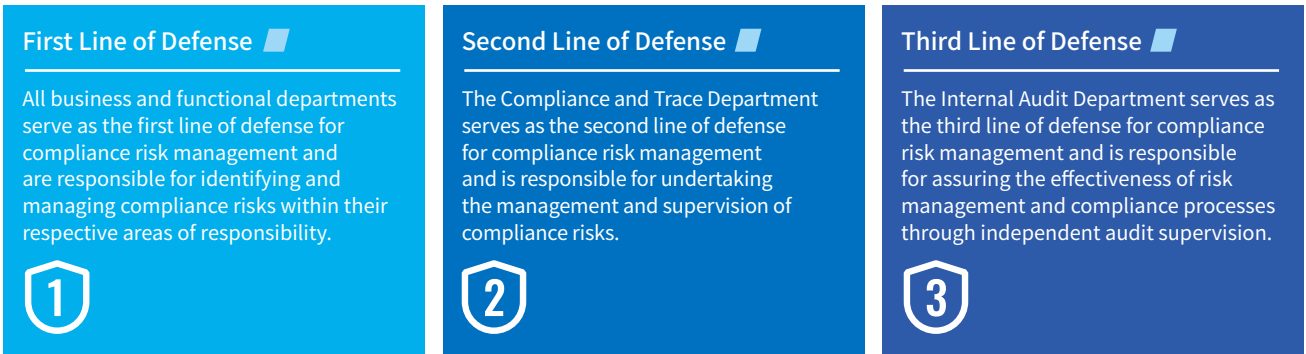
4.2.1

In adherence to the corporate motto of "To be an upstanding and responsible person and apply oneself with integrity and industry", we continuously standardize company behavior, uphold business ethics, and improve the risk management system to provide a management foundation for stable and sustainable operations. Meanwhile, the Company regards anti-corruption and business ethics as the core of corporate behavior management, promotes the construction of a clean culture, emphasizes fair competition management norms, prevents and curbs monopolistic behavior, and strives to create a fair and mutually beneficial business environment.

JA Solar continuously improves risk management by integrating basic risk management processes and systems into all aspects of the Company's production and operations, aiming to actively prevent and respond to internal and external risks, and enhance the Company's management resilience.

The Audit Committee of the Board of Directors supervises the Company's risk and compliance review and reviews the Company's risk assessment annually to ensure effective implementation of risk management measures. The members of the Company's Board of Directors possess rich risk management capabilities, including four non-independent directors and one independent director with professional risk management experience. The Company has established a Process Management Department in charge of risk review process to monitor and analyze internal and external risks such as strategic risk, market risk, operational risk, financial risk, and legal risk promptly, and reports various risk situations to the general manager and the Board of Directors through a reporting line independent of the business departments.

JA Solar has built a comprehensive risk management system through full business process coverage of risk identification, assessment, and management, and has established a "Three Lines of Defense" risk management framework based on compliance risks, effectively addressing potential risks and ensuring high-quality development for the Company.



Risk Identification

JA Solar actively conducts comprehensive risk identification. In response to compliance risks, the Company identifies, assesses, and provides early warnings for risks based on internal policies such as the *Compliance Obligation Identification and Risk Assessment Policy*. In 2024, the Company identified over 50 risks and compiled the JA Solar Comprehensive Compliance Risk Alert List for the *Compliance Management System Development*, covering key risks such as corporate governance, anti-business bribery, intellectual property, export control, labor employment, and anti-trust and anti-unfair competition.

Risk Management

For the identified risks, the Company actively carries out compliance risk prevention, assessment, and management in key areas, integrating these processes into the entire product and service development chain. We conduct quantitative assessment of risk levels, categorize risks, and implement tiered control measures, such as adding relevant compliance clauses, enhancing review processes, issuing related guidelines, and strengthening training.



Risk Awareness Enhancement Training

To raise the risk management awareness and capabilities of all employees, in 2024, JA Solar conducted multiple risk self-assessment exchange meetings and risk training activities with a focus on key risk areas.

Procurement Business Risk Self-assessment Exchange Meeting

CASE

In 2024, JA Solar held a procurement business risk self-assessment exchange meeting aimed at helping employees better identify and manage potential risks in the procurement process, thereby enhancing risk prevention capabilities.



Legal and Compliant Operations

4.2.2

JA Solar places great importance on compliance management. In strict adherence to various laws, regulations, and industry regulatory policies and guidelines, we keep improving our ability to operate in accordance with the law and compliance management capabilities, effectively preventing risks and achieving sustainable development. The Company actively develops its compliance management system in accordance with the ISO 37301 compliance management system. We have established a series of regulatory norms including the *Compliance Management Policy*, *Compliance Obligation Identification and Risk Assessment Policy*, *Compliance Review Policy*, *Compliance Incident Reporting and Disposal Policy*, *Compliance Assessment and Evaluation Policy*, and *Compliance Management System Review Policy*, and *Compliance Management System Review System*, which are not only provide fundamental guiding principles and daily operational procedures for compliance management but also offer effective references for supervising and evaluating management execution.

Key Performance

In 2024, JA Solar obtained ISO 37301:2021 Compliance Management System and GB/T 35770-2022 Compliance Management System certifications.

ISO 37301:2021
GB/T 35770-2022

ESG and Compliance Management Committee

JA Solar has established an ESG and Compliance Management Committee and appointed a Chief Compliance Officer as the director to report regularly to the Board of Directors. We fully leverage the leadership of the Company's senior management to promote compliance with anti-unfair competition, data compliance, safety and environmental compliance, and other compliance system constructions. Each business and functional department serves as the first line of compliance management and is responsible for identifying compliance obligations and risks within their departmental responsibilities, creating departmental or specialized compliance obligation lists and compliance risk lists, and updating them regularly. Meanwhile, the Company has set up part-time compliance coordinators in key departments to effectively promote compliance management, assist in handling various compliance matters, enhance the overall compliance level of the Company, and effectively reduce operational risks.

JA Solar Conducted Compliance Training for Part-time Compliance Coordinators

CASE

In May 2024, the Company invited external experts to conduct a two-day training on "ISO 37301:2021 Compliance Management System Practical Compliance Officer" for part-time compliance coordinators. The training covered the background of compliance management, standards, and detailed interpretations. In the end, a total of 32 part-time compliance coordinators passed the assessment and received training certificates.



Overseas Business Compliance Management

In terms of overseas business compliance management, JA Solar strictly adheres to international trade-related laws and regulations and has established an *Export Control Compliance Policy*. The policy aims to ensure that our products are exported legally and compliantly, effectively reducing potential risks arising from overseas trade restrictions. As of the end of 2024, JA Solar has not experienced any economic sanctions globally.

Compliance Culture Development

Regarding compliance culture development, JA Solar has established a comprehensive compliance training and culture-building system, requiring all employees to sign a compliance commitment letter. On one hand, the Company has set up a legal compliance column to cultivate a compliance culture, raise employees' awareness of compliance, and clarify their obligations to adhere to laws, regulations, and company rules. On the other hand, based on the characteristics of different positions, the Company has developed targeted training themes to ensure that training effectiveness matches job requirements. In 2024, the Company conducted 13 training sessions for executives, part-time compliance coordinators, all employees, and personnel in specific positions, covering topics such as compliance management policies and guidelines, export controls, anti-trust, labor employment, and other specialized compliance training.

Improved Internal Control

4.2.3

JA Solar highly values internal control work by establishing a series of internal management systems such as the Internal Audit Management System and the Work Plan for Standardized Implementation of Internal Control. In 2024, the Company added new systems such as the *Internal Control Risk Management System*, *Internal Control Risk Assessment Management System*, and *Major Internal Control Risk Event Reporting Mechanism*, and revised the *Responsibility and Accountability Management System* to ensure the standardized and stable operation of the Company and its subsidiaries and improve risk prevention capabilities. Meanwhile, in response to procurement internal control risks, the Company focuses on key business risks and areas with frequent issues, issuing the *Procurement Business Internal Control Risk Guidelines* to assist various units in preventing and controlling procurement business in advance, standardizing procurement behavior, and enhancing the Company's risk prevention capabilities.

The Audit Committee under the Company's Board of Directors is mainly responsible for communication, supervision, and verification of internal and external audits. The Audit Committee has an audit supervision center as its daily operational body for exercising internal audit supervision authority. The Company has set up an audit committee independent of the headquarters' functional departments and subsidiaries, which is responsible for overall internal control risk management. It evaluates the operation of the Company's internal control mechanisms based on the Guidelines for the Application of Internal Control in Enterprises and external regulatory requirements, while also considering the Company's institutional requirements. It is responsible for internal control risk identification, response to internal control risks, monitoring and reporting of internal control risk events, and management improvements.

The Company regularly summarizes and organizes audit issues and promptly conducts reviews and summaries of typical and significant audit cases. Based on this, written materials for risk prevention are created to provide targeted training for business units, effectively reducing business risks and ensuring the Company's stable operation. In 2024, the Company conducted training activities related to the promotion of internal control risk-related systems, continuously strengthening employees' awareness of internal control risks.



Launching the "Internal Control Insights" Column

CASE

In 2024, to raise our employees' awareness of internal control risks, we launched the "Internal Control Insights" column on the "LianJieJA" official WeChat account, regularly sharing knowledge on internal control and risk management. The column actively promotes the Company's internal control risk management level and elevates employees' awareness of internal control risk management. It also contributes to reinforcing the concept of institutionalized management, procedure-based systems, and information-based processes in internal control risk management, embedding internal control risk management into the entire business management process and transforming it into employees' conscious actions.



Adherence to Business Ethics

4.2.4

JA Solar strictly adheres to business ethics standards, comprehensively builds a clean management system, promotes a culture of integrity, conducts business operations with a responsible attitude, opposes any form of corruption, anti-competitive practices, and other improper business behaviors to create a fair, transparent, and win-win business ecosystem.

Anti-corruption and Integrity

JA Solar follows internationally recognized guidelines such as the *United Nations Guiding Principles on Business and Human Rights*, the International Labour Organization (ILO) *Declaration on Fundamental Principles and Rights at Work*, the *RBA Code of Conduct*, and the Ten Principles of the United Nations Global Compact (UNGC), and strictly complies with the Anti-Money Laundering Law of the People's Republic of China and other relevant laws and regulations in its overseas operations to ensure compliance with regulations regarding anti-bribery, anti-fraud, anti-extortion, and anti-money laundering.

JA Solar has always upheld the values of "sincerity, simplicity, respect, and gratitude", advocates a culture of integrity and honesty, maintains a "zero tolerance" attitude towards fraudulent behavior, and continuously strengthens anti-corruption and integrity construction. The Company has established a series of systems including the *Anti-Fraud Reporting and Handling Procedures*, *Whistleblower Protection and Integrity-based Reporting Management System*, and *Overseas Reporting Handling Procedures*, and regularly updated and reviewed them to meet actual management needs. The Company has formulated the *JA Solar Code of Conduct*, which sets forth behavioral norms and requirements in various areas such as business ethics, conflict of interest, prohibition of corruption and bribery, and reporting violations. During the reporting period, JA Solar also developed relevant policies, conducted business ethics training, and performed corruption risk assessments at operational points as part of its management objectives.

In 2024, JA Solar was awarded the "Integrity and Vitality Award" by the Corporate Anti-Fraud Alliance and the Corporate Internal Control Association.

JA Solar is committed to enabling a clean and transparent business ecosystem with partners and suppliers. The Company places great importance on the business ethics performance of its partners. Issuing an *Open Letter to JA Solar's Partners* requires partners to strictly adhere to business ethics standards and resolutely eliminate corruption and fraudulent behavior. In addition, JA Solar has signed the *Agreement on Integrity-based and Clean Cooperation* with Suppliers and established a detailed *JA Solar Supplier Code of Conduct* that explicitly regulates business ethics behaviors such as prohibiting bribery and anti-corruption. If a supplier is found to violate the Company's business ethics code, the Company will immediately terminate its business cooperation with them and blacklist them to ensure the integrity and sustainability of business cooperation.

In 2024, the coverage rate of the Agreement on Integrity-based and Clean Cooperation signed by JA Solar's suppliers reached 100%.

100%

In addition, JA Solar regularly conducts due diligence on third-party partners through public and legal channels, supervises and manages the integrity performance of distributors, and regularly provides integrity education and training for suppliers and distributors to strengthen the integrity awareness of partners.

To promote the construction of a clean business environment in the industry, JA Solar has joined initiatives such as the Enterprise Anti-Fraud Alliance and the Trust and Integrity Enterprise Alliance, leveraging the platform to build a clean and compliant business

The Audit Committee's Audit Supervision Center is responsible for continuously improving the internal supervision system, ensuring smooth anti-fraud channels, adhering to the principle of "fraud must be investigated, and investigations must be thorough" in investigating potential fraud cases and personnel and refining the anti-fraud and integrity system. The Company actively conducts anti-fraud supervision and risk assessments by combining internal and external whistleblower reports, forming a compliance obligation list for anti-business bribery and a risk assessment list, and developing targeted response strategies for identified risks to effectively reduce risks. In addition, the Company continuously improves its governance system, publishes audit supervision results and rectification status within an appropriate scope, and creates a virtuous cycle of promoting management through investigation and rectification. We also conduct audits of anti-corruption and anti-bribery-related systems and processes, strictly cracking down on various illegal and irregular activities, and providing a solid guarantee for building a clean and efficient operational environment. JA Solar actively evaluates and investigates all reported cases it receives. If any illegal activities are suspected, the case will be transferred to judicial authorities for handling. In 2024, a case involving an employee's bribery has been concluded, and the individuals involved have been legally sentenced.

In 2024, the Company conducted corruption risk assessments cover 100% of its operational sites and organized the signing of the *Integrity and Self-Discipline Commitment Letter*, reminding employees to strictly adhere to ethical standards, with 30,995 employees signing the Letter.

environment with partners. During the reporting period, JA Solar initiated the anti-fraud communication platform for the new energy photovoltaic industry - Integrity Circle - to strengthen communication and mutual support among peer companies, facilitate resource integration, and promote data sharing. This platform aims to contribute to the creation of a clean and integrity-based business environment and jointly build a new honest image for the new energy photovoltaic industry.

JA Solar Attended the 2024 National Enterprise Integrity Construction Conference

CASE

In October 2024, JA Solar, along with approximately 400 representatives from the government, associations, and enterprises, attended the "2024 National Enterprise Integrity Construction Conference", discussing topics such as "Innovating Credit Supervision to Create a First-Class Business Environment" and "Strengthening Corporate Integrity Management to Improve the Long-term Mechanism for Integrity Construction". The participants reached a consensus that integrity building serves as the foundation for the stable development of enterprises, and agreed to promote the healthy development of the photovoltaic industry through strict internal controls and fair competition and cooperation.



Working Together for Integrity and Win-Win Outcomes - The Inaugural Conference and First Offline Forum of the "Integrity Circle" Was Successfully Held

CASE

In March 2024, JA Solar, in collaboration with industry partners, successfully held the inaugural conference and first offline forum of the photovoltaic industry's first anti-fraud platform - the "Integrity Circle" at its headquarters in Beijing. The meeting shared anti-fraud experiences, discussed the establishment of an industry dishonesty database, promoted data sharing and cooperation, and jointly created a clean and transparent business environment to support the healthy development of the industry.



Reporting Channels

The Company has established a comprehensive reporting mechanism and streamlined reporting channels, ensuring the protection of whistleblowers' rights, interests, and privacy. JA Solar has formulated the *Whistleblower Protection and Integrity-based Reporting Management System* to strengthen integrity supervision and reporting management and standardize the management of all types of complaints and reports. In 2024, the Company added the Overseas Reporting Handling Procedures to further improve the reporting management system and ensure the effective handling of reporting information globally.

The Company provides various reporting channels such as official WeChat accounts, complaint hotlines, and email for internal and external stakeholders, and has established a global, multilingual, and fully anonymous third-party reporting platform called Speak Up.

By offering safe, convenient, and transparent reporting channels, JA Solar encourages employees, customers, suppliers, investors, and other internal and external stakeholders to promptly report unethical business practices and corruption issues such as bribery, corruption, extortion, fraud, and money laundering, enhancing the Company's ability to detect violations and promoting the improvement of compliance risk management.

JA Solar strictly keeps the information of whistleblowers confidential and prohibits any form of extortion, threats, or retaliation. Once a report is made, the Company's Internal Audit Department will quickly screen and conduct in-depth investigations, and cases involving illegal activities will be referred to the Legal Department for handling. We put in place domestic and international complaint reporting channels:

Domestic reporting channels



1. Scan the QR code to report directly
2. Official website: Click "Speak Up" in the upper right corner
3. Tel.: 010-63611911
4. DingTalk: "JA Solar" Organization - Workbench - Integrity Reporting
5. QQ: 3476840246
6. WeChat: LianJieJA
7. Email: antifraud@jasolar.com
8. Mail: JA Solar Audit Committee, No. 8 Building, Nuode Center, Fengtai District, Beijing

Overseas Reporting Channel

Speak Up platform

Integrity Culture

JA Solar values the construction of an integrity culture, conducts integrity education, establishes a work environment of integrity, honesty, and compliance with laws, and promotes the deepening of integrity culture through innovative special projects, activities, and diverse advocacy. During the reporting period, the Company conducted activities such as integrity surveys, integrity story competitions, International Anti-corruption Day-themed events, and Integrity Promotion Month, effectively conveying the integrity culture.

In addition, the Company actively conducts offline integrity promotion activities to guide employees in maintaining integrity in their work and strengthen their awareness of integrity in professional conduct.

Rich Integrity Culture Building Activities

- The Company produced an original integrity microfilm Choice, which has garnered over 17,000 views. It serves as a reminder for employees to strictly adhere to ethical standards, fosters a strong atmosphere of integrity, and enriches the Company's integrity culture.
- The Company released an integrity survey questionnaire through the "Yidian Zhishi" platform to understand the status quo of integrity within the Company, with a total of 3,306 participants. A total of 5,167 people participated in the voting for the integrity story selection activity, collecting 13 integrity stories.
- During the International Anti-corruption Day "Integrity Guessing Game" activity, 6,230 people answered questions, further promoting integrity culture and spreading knowledge about integrity.
- The Company regularly publishes articles through the "LianJieJA" official WeChat account and DingTalk service account, continuously enhancing employees' awareness of anti-corruption and integrity.

Key Performance

■ In 2024, JA Solar conducted 10 training sessions related to business ethics and anti-corruption, with a total of 81,817 participants, covering 100% of employees.

including full-time employees (including those on probation), part-time employees, and interns

100%

Antitrust and Unfair Competition

JA Solar strictly adheres to the *Anti-monopoly Law of the People's Republic of China*, *Anti-unfair Competition Law of the People's Republic of China*, *Foreign Trade Law of the People's Republic of China*, and the local laws and regulations of the areas where it operates, actively fulfilling its legal obligations regarding antitrust and anti-unfair competition. The Company is committed to maintaining a fair competitive market environment, resolutely resisting any actions that restrict or eliminate market competition through improper means, and ensuring the healthy and orderly development of the market.

The Company requires all personnel to comply with the laws and regulations related to competition and antitrust laws in all jurisdictions involved in the Company's business, and publicly disclose the *JA Solar Antitrust and Competition Law Global Compliance Policy*, as well as issue the *JA Solar Antitrust and Competition Law Compliance Guideline*, providing comprehensive behavioral guidance for the Company and its employees to uphold fair competition, clarifying the consequences of violations.

During the reporting period, the Company actively carried out capacity-building initiatives, promoting and providing training on antitrust and anti-unfair competition topics through activities such as executive compliance training organized by the ESG and Compliance Management Committee, compliance management system training, and compliance obligation identification and risk assessment training.



Intellectual Property Protection

4.3

Intellectual property plays a core role in stimulating technological innovation. JA Solar strictly adheres to the *Patent Law of the People's Republic of China*, the *Implementation Rules of the Patent Law of the People's Republic of China*, and other relevant laws and regulations, and has developed and implemented a series of internal regulations such as the *Intellectual Property Management Measures* and the *Trade Secret Management Measures*, which clarify patent protection measures and penalties for violations, providing institutional guarantees for intellectual property management.

In terms of intellectual property risk management, JA Solar has established an intellectual property management system that covers the entire lifecycle of product research and development, production, and sales, ensuring the systematic and comprehensive management of patents. During the reporting period, the Company continuously optimized its intellectual property management mechanism, further improving a multidimensional management system and rights protection mechanism covering patents, trademarks, trade secrets, software copyrights, etc., to effectively maintain the Company's technological advantages.

To mitigate product infringement risks, the Company has continuously strengthened the efforts of Freedom to Operate (FTO) investigations by integrating its internal intellectual property team with external legal teams to conduct in-depth investigations into core cell technologies such as TOPCon, IBC, HJT, and key busbar technologies, ensuring the compliance and market competitiveness of its proprietary technologies.

In 2024, JA Solar continued to improve trademark management by launching a trademark management system, achieving full-process digital management from trademark application and maintenance to operation, significantly enhancing the efficiency and accuracy of trademark management. Meanwhile, the Company signed an authorization contract with its European affiliate and completed the filing, further standardizing the Company's internal trademark authorization and laying the foundation for trademark maintenance and protection in the European market. In addition, the Company adjusted its trademark management model, consolidating all trademarks under the ownership of JingAo Solar Co., Ltd. optimizing the trademark management system, and improving the efficiency of trademark applications, maintenance, and operations. In 2024, the Company was granted a total of 28 new registered trademarks, bringing the total number of registered trademarks to 356 both domestically and internationally.

As of the end of 2024, JA Solar held a total of 1,899 valid authorized patents, with 866 new authorized patents added in 2024. In the future, JA Solar will continue to strengthen its intellectual property management, deepen its global patent layout, and inject vitality into the promotion of innovation and development in the industry.

Key Performance

■ In 2024, the Company was granted 28 new registered trademarks, bringing the total number of both domestic and international registered trademarks to 356.

■ By the end of 2024, JA Solar held 1,899 valid patents, with 866 newly authorized patents in 2024.

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866



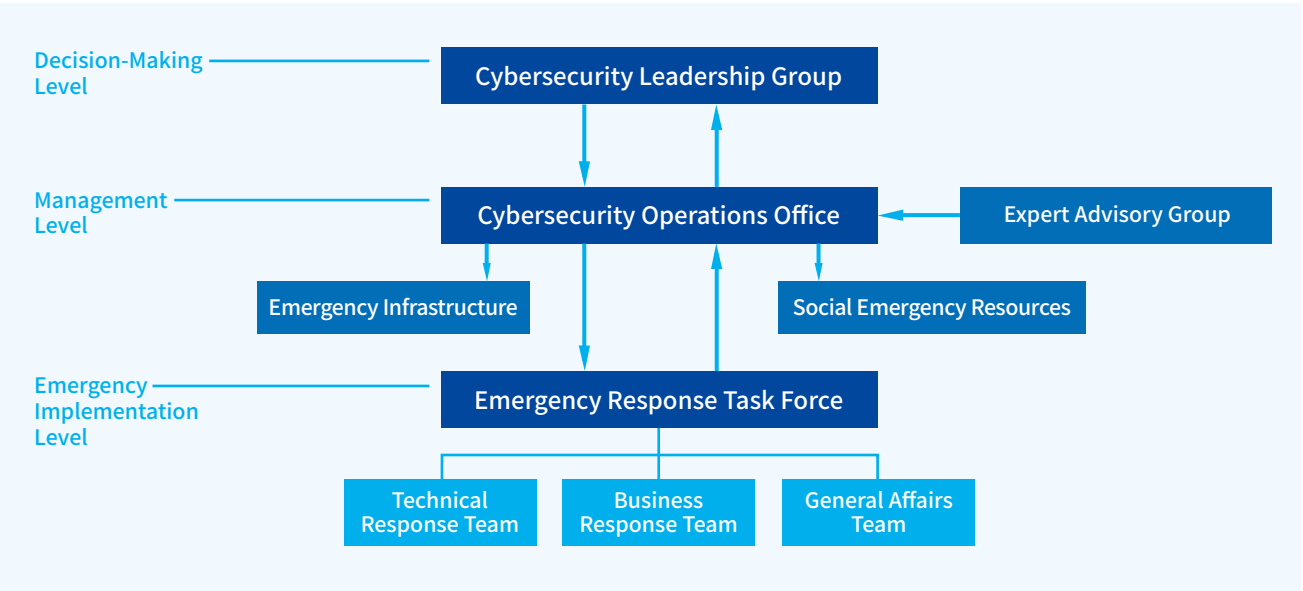
Safeguarding Information Security

4.4

JA Solar places a high priority on information security and privacy protection. The Company strictly adheres to national laws and regulations such as the *Data Security Law of the People's Republic of China* and the *Personal Information Protection Law of the People's Republic of China*, and has established a series of regulations for information security and privacy protection, including the *Information Security Management Procedures, System and Cybersecurity Management Regulations*, and *Trade Secret Management Measures*. The Board of Directors and executive management of JA Solar actively participate in the formulation and review of information security and cybersecurity policies, and have developed comprehensive related policies and management structures, conducted independent external audit and obtained relevant certifications of our information security management systems, and set management goals to prevent information security violations. In 2024, the Company updated the *System and Cybersecurity Management Regulations*, revised content related to visitor network access management and system security requirements, and clarified visitor network access permissions and approval processes, password policies, and permission management, further enhancing system security.

Meanwhile, to more efficiently address potential information security issues, the Company has established a dedicated cybersecurity governance mechanism to lead the office in charge of information security activities and clarified the reporting and emergency handling processes for information security incidents.

Organization Structure for Information Security Emergency Response of JA Solar



Key Performance

In 2024, JA Solar obtained ISO 27001 Information Security Management System and ISO 27701 Privacy Information Management System certifications.

ISO 27001
ISO 27701



In response to public emergencies related to cybersecurity and information security, JA Solar has developed emergency response management systems such as the *Management System for Emergency Response of Security Incidents* to ensure the stability and security of critical computer information systems during emergencies. During the reporting period, the Company updated the *Business Continuity Emergency Response Management System*, adding content on the classification of emergency incidents, vulnerability analysis and escalation process for employees to report incidents related to information security for business systems and emergency plans, and improved the response processes and management requirements of the emergency plans to provide effective assurance for business continuity. In 2024, JA Solar organized four emergency response tests to ensure the effectiveness and responsiveness of the emergency mechanism.

In terms of privacy protection, the Company strictly implements data access control measures, conducts security testing and defense mechanisms for personal terminal data, and performs real-time monitoring and encryption of critical data traffic under specific conditions, detecting key data and file formats to ensure the security of data transmission. In 2024, JA Solar did not experience any confirmed customer privacy complaints or incidents of customer privacy breaches.

Regarding data security management in the supply chain, JA Solar has signed a *Mutual Confidentiality Agreement* with suppliers to protect the privacy and information ownership of both parties. Meanwhile, the Company provides information security knowledge training for suppliers involved in project implementation, covering topics such as data center safety operations, fire safety, and network security access control. For service suppliers stationed long-term, the Company also requires them to sign a *Cybersecurity Commitment Letter* to ensure that data security responsibilities are effectively implemented.

In 2024, JA Solar did not experience any information security violations.

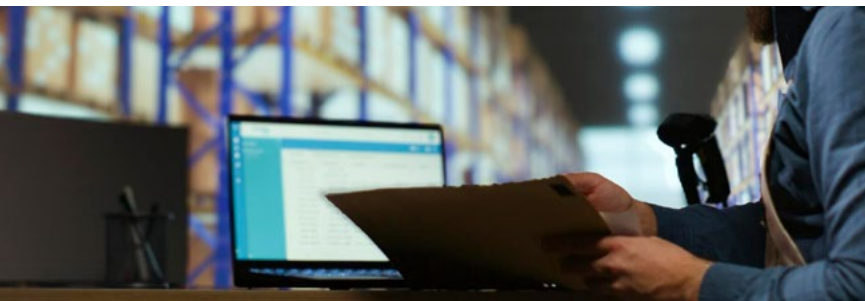
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JA Solar actively conducts information security training and drills to enhance employees' awareness of information security and privacy protection. In 2024, the Company organized four simulated phishing email drills, covering scenarios such as "Important Meeting Notification", "Remote Login Notification", and "Account Password Reset Notification", to improve employees' ability to identify and prevent cyber attacks. During the reporting period, the Company's knowledge platform uploaded a training course on "Identification and Prevention of Cybersecurity Risks", providing information security training on awareness, risk identification and investigation, attack and defense techniques, and security equipment operation to all employees, totaling 14 sessions and covering 24,674 participants.

JA Solar conducted a total of 14 information security training sessions.

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KEY PERFORMANCE INDICATORS

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Economic Performance					
Operating Income		RMB 10 ⁸	729.89	815.56	701.21
Shipment Of Cells And Modules		GW	39.75	57.09	79.45
Environmental Management System					
Non-compliance with Environmental Laws and Regulations	Amount of Fines	RMB 10 ⁴	0	0	0
	Number of Incidents	case	0	0	0
	Number of Cases Brought through Dispute Resolution Mechanisms	case	0	0	0
Employee Environmental Training	Number of Sessions	session	345	434	438
	Number of Employees Participating	attendance	13,420	45,402	35,595
Environmental Protection Investment	Environmental Protection Investment	RMB 10 ⁴	-	-	8,761
Energy Management					
Energy Consumption	Comprehensive Energy Consumption ¹	tce	537,311.85	799,359.32	1,059,002.77
	- Electricity Consumption	MWh	4,293,020.17	6,472,368.61	8,553,357.57
	- Natural Gas Consumption	10 ⁴ m ³	40.64	107.85	334.75
	- Coal Consumption	tonne	0	0	0
	- Diesel Consumption (burning of stationary source)	tonne	8.14	15.64	6.23
	- Diesel Consumption (burning of mobile source)	tonne	265.13	338.56	187.78
	- Gasoline Consumption	tonne	101.45	231.29	158.70
	- LPG Consumption	tonne	137.30	6.09	34.54
	- Heating Consumption	GJ	245,498.00	46,981.63	90,135.92
	- LNG Consumption	tonne	-	0.54	-
	Total Energy Consumption (Non-renewable Energy)	tce	396,108.76	579,009.62	697,786.40
	Total Energy Consumption (Renewable Energy)	tce	141,203.09	220,349.70	361,216.37
	Electricity Consumption	MWh	4,293,020.17	6,472,368.61	8,553,357.57
	- Market-based Purchase of Green Electricity	MWh	1,115,023.11	1,725,983.91	2,747,168.56
	- Other Purchased Electricity	MWh	3,144,093.46	4,679,449.96	5,614,249.56
	- In-plant Distributed Green Electricity Consumption	MWh	33,903.61	66,934.74	191,939.45
	Clean Energy Consumption	MWh	-	-	2,975,333.85
	- Solar Energy Consumption	MWh	-	-	191,939.45
	- Percentage of Solar Energy Consumption	%	-	-	6.45%
	- Natural Gas Consumption	MWh	-	-	36,225.84
	- Percentage of Natural Gas Consumption	%	-	-	1.22%
	- Other Clean Energy Consumption	MWh	-	-	2,747,168.56
	- Percentage of Other Clean Energy Consumption	%	-	-	92.33%

¹ The calculation of comprehensive energy consumption is based on the General Rules for Calculation of the Comprehensive Energy Consumption (GB/T 2589-2020), covering both direct energy sources such as natural gas, diesel, gasoline, liquefied petroleum gas, and liquefied natural gas, and indirect energy sources such as electricity and thermal energy.

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Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Energy Management					
Energy Intensity	Comprehensive Energy Consumption Intensity ¹	tce/MW	13.52	14.00	13.33
Scale of Self-owned PV Station	Scale of Self-owned PV Station	MW	963	2,165	3,700
	- Centralized	MW	788	788	710
	- Distributed	MW	175	1,377	2,990
	Scale of Self-generated and Self-used Distributed PV Plant	MW	50	138	298
Water Resources Use and Management					
Water Withdrawal	Total Water Withdrawal	m ³	23,838,835.03	30,924,897.90	41,276,283.98
	Water Withdrawal by Source				
	① Municipal Water	m ³	18,369,057.10	28,885,382.90	40,329,323.98
	② Rainwater Collected and Stored Directly by Enterprises	m ³	18,000.00	36,027.00	84,200.00
	③ Wastewater from Other Enterprises or Organizations	m ³	-	-	-
	④ Ground Water	m ³	5,451,777.93	2,003,488.00	573,602.00
	⑤ Surface Water	m ³	-	-	-
	⑥ Others	m ³	-	7,395,522.00	289,158.00
Water Intensity	Water Intensity	m ³ /MW	599.72	541.65	519.54
Water Discharge	Total Wastewater Discharge	m ³	20,538,665.96	23,618,520.50	32,409,734.94
	By Discharge Destination				
	① Discharged to Sewage Pipes	m ³	16,067,278.96	23,618,520.50	32,409,734.94
	② Discharged to Surface Waters	m ³	-	-	-
	③ Discharged to Ground Waters	m ³	-	-	-
	④ Others	m ³	4,471,387.00	-	-
Water Consumption	Total Water Consumption ²	m ³	3,300,169.07	7,306,377.41	8,866,549.04
Water Resources Recycling and Use	Water from Alternative Sources	m ³	-	-	1,944,656.00
	- Purchased Recycled Water	m ³	-	-	1,544,298.00
	- Harvested Rainwater	m ³	-	-	84,200.00
	- Condensate Water	m ³	-	-	316,158.00
	Recycled Water ³	m ³	6,627,645.63	162,141,605.34	12,267,217.00
	- Reclaimed Water	m ³	-	-	12,169,545.00
	- Process Cooling Water (PCW)	m ³	-	-	97,672.00
	Percentage of Water from Alternative Sources ⁴	%	-	-	27%
	Percentage of Recycled Water ⁵	%	-	84%	23%
Ultrapure Water	Ultrapure Water Consumption	m ³	-	-	24,574,321.66

¹ During the reporting period, the comprehensive energy consumption intensity was recalculated based on the shipment volume of cells and modules, and historical data was revised accordingly.

² According to GRI 303-5, water consumption = water withdrawal - water discharge

³ The statistical scope and measurement method for water resource recycling volume have been adjusted this year to include reclaimed water reuse and process cooling water (PCW).

⁴ Percentage of water from alternative sources = (amount of water from alternative sources + recycled amount of water resources) / (water withdrawal + recycled amount of water resources × 100%

⁵ Recycling rate of water resources = Recycled amount of water resources/(water withdrawal+recycled amount of water resources)×100%

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Emissions and Waste Management					
Other Significant Gas Emissions	Nitrogen Oxide (NOx) Emissions	kg	5,503.77	4,870.93	51,630.06
	Sulfur Oxide (SOx) Emissions	kg	111.98	171.50	6.27
	Volatile Organic Compounds (VOCs) Emissions	kg	91,617.74	107,821.00	144,858.46
	Fluoride	kg	21,759.99	28,504.85	73,089.58
	Chlorine	kg	-	-	9,130.39
	Ammonia	kg	23,469.84	95,122.06	33,582.48
	Hydrogen Acid	kg	-	-	69,356.59
	Hydrogen Sulfide	kg	-	-	456.65
	Oil Smoke	kg	-	-	179.25
	Particulate Matter (PM)	kg	89,684.79	97,062.91	97,740.72
Water Pollutant Emissions	Benzene Series Compounds	kg	-	-	1,398.44
	Chemical Oxygen Demand (COD)	tonne	-	-	1,972.37
	Biochemical Oxygen Demand (BOD)	tonne	-	-	382.10
	Ammonia Nitrogen	tonne	-	-	173.53
	Total Nitrogen	tonne	-	-	383.07
	Total Phosphorus	tonne	-	-	10.14
	Fluoride	tonne	-	-	81.68
	Suspended Solids (SS)	tonne	-	-	958.45
	Anionic Surfactants	tonne	-	-	0.52
	Petroleum Products	tonne	-	-	13.74
Waste Generation and Recycling	Amount of Hazardous Waste Generated	tonne	2,132.52	2,194.84	17,708.96
	Hazardous Waste Intensity	tonne/MW	0.05	0.04	0.22
	Amount of Non-hazardous Waste Generated	tonne	113,125.64	236,509.31	372,094.32
	Non-hazardous Waste Intensity	tonne/MW	0.15	0.29	0.53
	Amount of Waste Recycled	tonne	54,390.50	171,700.77	338,831.41
	- Amount of Hazardous Waste Recycled	tonne	93.90	231.51	8,221.45
	- Amount of Non-hazardous Waste Recycled	tonne	54,296.60	171,469.26	330,609.96
Hazardous Waste	Hazardous Waste Directed to Disposal	tonne	-	-	17,669.14
	By Disposal Method				
	① Landfilling	tonne	-	-	-
	② Incineration (with energy recovery)	tonne	-	-	122.96
	③ Incineration (without energy recovery)	tonne	-	-	9,241.39
	④ Recycling	tonne	93.90	231.51	8,221.45
	⑤ Other disposal operations	tonne	-	-	62.30
	⑥ Unknown method	tonne	-	-	21.04

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Emissions and Waste Management					
Non-hazardous Waste	Non-hazardous Waste Directed to Disposal	tonne	-	-	372,164.48
	By Disposal Method				
	① Landfilling	tonne	-	-	4,877.98
	② Incineration (with energy recovery)	tonne	-	-	18,658.90
	③ Incineration (without energy recovery)	tonne	-	-	17,135.00
	④ Recycling	tonne	54,296.60	171,469.26	330,609.96
	⑤ Other disposal operations	tonne	-	-	658.92
	⑥ Unknown method	tonne	-	-	223.72
Combating Climate Change					
GHG Emissions	Total GHG Emissions (Scope 1+Scope 2)	tCO ₂ e	1,879,379	2,871,963	3,327,959
	Scope 1: Direct GHG emissions	tCO ₂ e	45,268	109,178	107,171
	Scope 2: Indirect GHG Emissions from imported energy	tCO ₂ e	1,834,111	2,762,785	3,220,788
	GHG emission intensity in operational scope ¹	tCO ₂ e/MW	47.28	50.30	41.89
	Scope 3: Other Indirect GHG Emissions	tCO ₂ e	15,702,382	24,351,855	32,233,663
	Purchased Goods and Services (Category 1)	tCO ₂ e	-	19,142,262	27,778,243
	Capital Goods (Category 2)	tCO ₂ e	-	3,159,340	2,775,785
	Fuel- and Energy-Related Activities (Category 3)	tCO ₂ e	-	489,806	414,770
	Upstream Transportation and Distribution (Category 4)	tCO ₂ e	-	717,898	959,120
	Waste Generated in Operations (Category 5)	tCO ₂ e	-	73,677	12,336
	Business Travel (Category 6)	tCO ₂ e	-	8,269	10,506
	Employee Commuting (Category 7)	tCO ₂ e	-	38,436	42,206
	Upstream Leased Assets (Category 8)	tCO ₂ e	-	30,609	28,875
	Downstream Transportation and Distribution (Category 9)	tCO ₂ e	-	6,474	61,482
	Processing of Sold Products (Category 10)	tCO ₂ e	-	247,934	59,381
	Use of Sold Products (Category 11)	tCO ₂ e	-	0	N/A
	End-of-Life Treatment of Sold Products (Category 12)	tCO ₂ e	-	47,813	61,035
	Downstream Leased Assets (Category 13)	tCO ₂ e	-	2	254
	Franchises (Category 14)	tCO ₂ e	-	0	N/A
	Investments (Category 15)	tCO ₂ e	-	389,335	29,670

¹ During the reporting period, the GHG emissions intensity was recalculated based on the shipment volume of cells and modules, and historical data was revised accordingly.

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Employment					
Employment	Number of Employees ¹	person	32,591	50,258	37,289
	By Employment Type				
	Full-time Employees	person	29,900	46,147	35,935
	Outsourced/Dispatched Labor	person	2,633	4,097	1,350
	Part-time Employees	person	58	14	4
	By Gender				
	Male Employees	person	21,285	33,320	26,692
	Female Employees	person	8,615	12,827	10,597
	By Age				
	Under 30	person	10,013	19,634	13,716
	30-50	person	19,690	26,311	23,282
	Over 50	person	197	202	291
	By Rank				
	Senior Management Employees	person	-	-	61
	Middle Management Employees	person	-	-	905
	Junior Management Employees	person	-	-	1,325
	Front-line Employees	person	-	-	34,998
	By Nationality				
	Chinese Employees	person	-	42,706	34,911
	Overseas Employees	person	-	3,441	2,378
	By Country: ① China	person	-	-	34,911
	By Country: ② Vietnam	person	-	-	1,978
	By Country: ③ United States	person	-	-	273
	By Country: ④ Spain	person	-	-	18
	By Country: ⑤ Japan	person	-	-	17
	By Country: ⑥ Others	person	-	-	92
	Percentage of Chinese Management Employees	%	-	-	99.53%
	Percentage of Overseas Management Employees	%	-	-	0.47%
	By Location				
	Domestic Employees	person	27,003	42,706	34,757
	Overseas Employees	person	2,897	3,441	2,532
	By Production Entity				
	Number of Production Entity Employees	person	-	-	34,313
	Number of Domestic Production Entity Employees	person	-	-	32,044
	Number of Overseas Production Entity Employees	person	-	-	2,269
	Number of Non-production Entity Employees	person	-	-	2,976
	Number of Domestic Non-production Entity Employees	person	-	-	2,825
	Number of Overseas Non-production Entity Employees	person	-	-	151

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Employment					
Recruitment	Number of Employees Filling Vacant Positions through Internal Recruitment	person	-	-	733
	Percentage of Employees Filling Vacant Positions through Internal Recruitment	%	-	-	5%
	- Number of Male Employees Filling Vacant Positions through Internal Recruitment	person	-	-	587
	- Number of Female Employees Filling Vacant Positions through Internal Recruitment	person	-	-	146
	- Number of Employees Aged under 30 Filling Vacant Positions through Internal Recruitment	person	-	-	274
	- Number of Employees Aged 30-50 Filling Vacant Positions through Internal Recruitment	person	-	-	459
	Number of New Employees	person	18,796	-	14,907
	- Under 30	person	9,754	-	9,240
	- 30-50	person	9,001	-	5,661
	- Over 50	person	41	-	6
	- Male Employees	person	13,851	-	11,303
	- Female Employees	person	4,945	-	3,604
	Senior Management Employees	person	-	-	6
	Middle Management Employees	person	-	-	81
	Junior Management Employees	person	-	-	163
	Front-line Employees	person	-	-	14,657
Employee Rights and Interests	Social Insurance Coverage Rate	%	100%	100%	100%
	Labor Contract Signing Rate	%	100%	100%	100%

¹ The total number of employees includes the sum of all active employees who have signed formal labor contracts with the company, those employed under labor dispatch agreements, and those working in non-full-time employment arrangements. For the following categorized indicators, the statistical scope covers full-time contract employees in 2022 and 2023, while in 2024 it covers the total number of employees.

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Employee Training					
Employee Training	Employee Training Coverage Rate	%	-	99%	100%
	Number of Employee Training Sessions	/	-	-	11,885
	Average Training Hours per Employee	hour	55.68	56.28	33.00
	- Male Employees	hour	-	55.70	33.00
	- Female Employees	hour	-	57.80	34.00
	- Senior Management Employees	hour	42.58	116.00	7.00
	- Middle Management Employees	hour	104.69	111.00	43.00
	- Junior Management Employees	hour	-	-	65.00
	- Front-line Employees	hour	28.87	43.00	31.00
	Number of Employee Training	attendance	19,270	1,242,563	906,699
	- Male Employees	attendance	-	874,227	637,924
	- Female Employees	attendance	-	368,336	268,775
	- Senior Management Employees	attendance	1,858	1,921	595
	- Middle Management Employees	attendance	6,452	17,602	19,813
	- Junior Management Employees	attendance	10,960	1,223,040	886,291
Professional Training	Percentage of Employees Receiving Diversity Training	%	-	-	100%
	Percentage of Employees Receiving Social Responsibility Training	%	-	-	100%
	Internal Professional Training	session	17,117	31,732	8,913
		attendance	-	610,776	680,024
		hour	-	169,667	160,120
	Funded External Professional Training	session	-	5,270	1,426
		attendance	1,901	11,730	1,088
		hour	17,684.00	223,442.00	175,370.94
		RMB 10 ⁴	238.88	592.00	321.98
	Career Development	Percentage of Employees Accepting Regular Performance and Career Development Reviews	%	-	100%

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Diversity and Equal Opportunity					
Local Hiring	Percentage of Local Executives	%	-	-	97.65%
Female Representation in Management	Female Employees in Senior Management	person	-	-	5
	Female Employees in Middle Management	person	-	-	199
	Female Employees in Junior Management	person	-	-	238
Other Diversity Indicators for Employees	Minority Employees	person	944	4,080	1,857
	Disabled Employees	person	27	32	42
	Average Employment Years of Male Employees	year	-	-	6
	Average Employment Years of Female Employees	year	-	-	6
Percentage of Female Employees by Function	Percentage of Female Employees in Revenue-generating Departments ¹	person	-	-	208
	Percentage of Female Management in Revenue-generating Departments ²	person	-	-	45
	Percentage of Female Employees in STEM Positions	person	-	-	781
	Percentage of Female Managers in STEM Positions	person	-	-	95
Pay Equity	Ratio of Average Hourly Wage of Female Employees to that of Male Employees ³	%	-	-	89%
Employee Career and Health					
Occupational Health	Percentage of Employees Covered by Occupational Health and Safety Management System ⁴	%	100%	100%	100%
	Number of Health and Safety Training Sessions	session	8,711	8,320	469
	Employees Participating in Occupational Health and Safety Training	attendance	362,732	179,187	38,779
Occupational Injuries	Number of Work-related Fatalities	person	1	1	0
	Number of Contractor Fatalities	person	-	1	0
	Fatality Rate (FTLR)	/	0	0	0
	Number of Occupational Disease Cases	case	-	-	0
	Number of Employee Fatalities Due to Occupational Diseases	case	-	-	0
Occupational Health and Safety Liability Insurance	Lost-Time Injury Frequency Rate (LTIFR) ⁵	/	0.47	0.29	0.30
	Number of Employees Suffering from Occupational Diseases	person	0	0	0
	Investment Amount	RMB	-	-	7,374,360
	Coverage Rate	%	-	-	100%

¹ Revenue-generating departments refer to departments associated with revenue-generating functions (such as sales), as opposed to supporting functions (such as Human Resources, IT, etc.).

² STEM positions refer to those related to Science, Technology, Engineering, and Mathematics.

³ The data was collected as of October 2024.

⁴ It covers only the main material production sites.

⁵ It covers only the main material production sites.

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Supply Chain Management					
Number of Suppliers	Number of Suppliers	supplier	-	-	975
	- Number of Suppliers in Chinese Mainland	supplier	-	-	935
	- Number of Suppliers from Hong Kong, Macau, Taiwan, and Overseas	supplier	-	-	40
	Number of First-level Suppliers	supplier	-	-	975
	Percentage of First-level Suppliers in Total Procurement	%	-	-	100%
	Number of Core Suppliers	supplier	-	-	110
	Number of Non-core Suppliers	supplier	-	-	865
Negative Environmental Impacts in the Supply Chain and Actions Taken	Number of Suppliers that Have Undergone Social and Environmental Impact Assessment	supplier	190	220	104
	Number of Suppliers Identified with Actual and Potential Significant Negative Environmental Impacts	supplier	0	0	0
	Number of Suppliers Identified with Actual and Potential Significant Negative Social Impacts	supplier	0	0	0
Supplier Training	Number of Supplier Training Sessions	session	-	-	200 ¹
Local Procurement	Percentage of Procurement Expenditure from Local Suppliers (Same Province)	%	-	-	29%
	Percentage of Procurement Expenditure from Local Suppliers (Same Country)	%	-	-	91%
R&D Innovation and Intellectual Property Right Protection					
R&D Innovation	R&D Expenses	RMB 10 ⁸	46.08	44.46	37.11
	Number of R&D Employees	person	2,276	2,426	2,148
	Number of Authorized Intellectual Property Rights	item	1,260	1,263	1,899
	Number of Newly Authorized Intellectual Property Rights	item	215	138	866
Clean Technology	Total Revenue from Clean Technology Products and Services	RMB 10 ⁸	729.89	815.56	701.21
	Percentage of Revenue from Clean Technology Products and Services to Total Revenue	%	100%	100%	100%
Product and Service Information and Logos					
	Number of Product Categories for Which Environmental and Social Impacts are Assessed during the Reporting Period	category	-	26	18
	Number of Total Product Categories in the Reporting Period	category	-	29	21
	Percentage of Assessed Products out of All ¹	%	-	90%	86%
Customer Rights and Interests Protection					
	Customer Satisfaction Rate	score	96.48	95.99	94.80
	Number of Product Recall Incidents	case	-	-	0
Community Investment					
Public Welfare Donations	Donations in the "Three Major Projects for the Benefit of the People"	RMB 10 ⁴	167.51	178.56	69.91
	Donation of Overseas Assistance	RMB 10 ⁴	20.56	70.36	37.22

¹ Percentage of assessed products in all products (%) = product categories for which environmental and social impacts are assessed/total number of product categories × 100%

Primary Indicators	Secondary Indicators	Unit	2022	2023	2024
Corporate Governance					
Board Members	Number of Board Members	person	9	9	9
	Number of Executive Directors	person	-	3	3
	Number of Independent Directors	person	-	3	3
	Number of Other Non-executive Directors	person	-	3	3
	Number of Female Board Members	person	3	3	3
Board Diversity	Percentage of Female Board Directors	%	33%	33%	33%
Anti-corruption and Business Ethics					
	Percentage of Operation Sites that have Accepted Corruption Risk Assessment	%	100%	100%	100%
	Number of Confirmed Corruption Incidents	case	0	0	1
	Number of Anti-corruption Training Participants	attendance	3,177	98,204	81,817
	Number of Anti-corruption Training Sessions	session	4	5	10
Information Security and Privacy Protection					
Customer Privacy Protection	Number of Substantiated Complaints of Invasion of Customer Privacy and Loss of Customer Data	case	0	0	0
Data Security Training for Employees	Number of Employee Information Security Training Sessions	session	24	37	14
	Number of Employee Information Security Training Participants	attendance	5,623	49,878	24,674
Information Security Incidents	Number of Litigation Cases Related to Information Security	case	0	0	0

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¹ JA Solar has not yet engaged in scientific research, technology development, or other activities in sensitive fields such as life sciences and artificial intelligence. We will also continuously pay attention to the management of technological ethics in its future operations.

² As of the end of the reporting period, the Company's accounts payable (including accounts payable notes) balance is detailed in the 2024 Annual Report of JA Solar Technology Co., Ltd.

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GRI CONTENT INDEX

Usage Instructions	JA Solar reported the information referenced in this GRI Content Index in accordance with the GRI Standards for the period from January 1 to December 31, 2024.
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Assessment of Sustainability Issues and Impacts, Risks, and Opportunities

No.	Issue	Issue Description	Scope of Impact	Impact Period
1	Combating Climate Change	The Company establishes a governance framework to address climate change, clarifying the climate governance responsibilities of the board and executives. Identify and manage the risks and opportunities related to climate change in the Company's production and operational activities, actively set GHG reduction targets, manage GHG emissions, and respond to global climate change.	Self-operation Upstream value chain Downstream value chain Community	Medium to long-term
2	Energy Management	Reduce energy consumption and minimize environmental impact through optimizing energy management, improving efficiency, and promoting the use of renewable energy. Energy types include but are not limited to electricity, natural gas, diesel, etc.	Self-operation	Medium to long-term
3	Product Lifecycle Stewardship	The Company effectively manages each stage of the product life cycle, including design, manufacturing, sales, use, disassembly, and recycling, to promote the development of a circular economy.	Self-operation Upstream value chain Downstream value chain	Short, medium, and long term

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Main Positive and Negative Impacts	Risks and Opportunities and Their Potential Financial Impacts
<p>Main Positive: The Company has effectively reduced direct and indirect GHG emissions by implementing comprehensive GHG emission management measures (such as adopting green supply chain management and low-carbon technologies in operations and logistics). The Company's clean energy technologies have had a verifiable positive impact on global energy transition and industrial decarbonization.</p> <p>Negative Impacts: Using high-energy consumption and high-carbon emission processes during operations may lead to increased GHG emissions, exacerbating environmental issues such as the greenhouse effect to some extent.</p>	<p>Physical risks: Extreme weather may cause damage to the Company's infrastructure and equipment, leading to a series of direct or indirect financial losses in the current and future periods, such as asset damage, increased maintenance costs, and insurance expenses.</p> <p>Transition risks: Higher demands for climate information disclosure from both domestic and international stakeholders. The increasingly ambitious national emission reduction targets and net-zero actions will require companies to accelerate their climate transition and increase policy costs for businesses.</p> <p>Opportunities: Implementing preventive measures to address physical risks such as extreme weather will help enhance the resilience of companies against risks and ensure the continuity of production and operations. Developing green products and solutions will continuously reduce current and future operating costs and create more market opportunities.</p>
<p>Main Positive: The Company has a high level of energy management, establishing a systematic approach to energy management. By improving energy efficiency and advocating for the use of renewable energy, it gradually reduces reliance on fossil fuels to promote a green transition in the energy structure, continuously enhancing energy-saving awareness and reducing negative impacts on the environment.</p> <p>Negative Impacts: If energy use efficiency cannot be effectively improved or if there is a lack of reasonable planning and management of energy supply, the Company's production may exacerbate energy consumption and harm the external environment.</p>	<p>Risks: Production equipment that heavily relies on traditional energy sources may lead to rising energy costs if not updated promptly. The energy-efficiency renovation of infrastructure and the upgrade of resource management may incur high costs in the short term, such as the procurement and operation of high-efficiency equipment.</p> <p>Opportunities: By actively promoting energy-saving renovation projects and phasing out inefficient, high-energy-consuming equipment, companies have the opportunity to improve energy efficiency and reduce operating costs. By overusing green energy to replace traditional energy sources, companies can reduce their dependence on traditional energy and lessen the impact of fossil fuel price fluctuations on operating costs.</p>
<p>Main Positive: The Company optimizes and builds a green product management system in various stages such as product design, raw material procurement, production manufacturing, packaging and transportation, product use, disassembly, and recycling, striving to minimize resource and energy consumption, provide green low-carbon products for society, continuously reduce the impact on the ecological environment, and promote high-quality development of the circular economy.</p> <p>Negative Impacts: If a company does not effectively manage certain key stages of the product's entire lifecycle (such as product disassembly and recycling), it may cause environmental impacts such as soil pollution and resource waste.</p>	<p>Opportunities: By actively promoting energy-saving renovation projects and phasing out inefficient, high-energy-consuming equipment, companies have the opportunity to improve energy efficiency and reduce operating costs. By overusing green energy to replace traditional energy sources, companies can reduce their dependence on traditional energy and lessen the impact of fossil fuel price fluctuations</p>

No.	Issue	Issue Description	Scope of Impact	Impact Period
4	Biodiversity and Ecosystem Protection	We focus on the Company's impact on ecosystems and biodiversity during project development, construction, and operations. By building biodiversity parks, expanding photovoltaic application scenarios—such as the green ecological development model of "on-panel power generation, under-panel planting, and inter-panel breeding"—and promoting awareness and training, we support or directly participate in biodiversity conservation efforts, striving to achieve harmonious coexistence with nature.	Self-operation Upstream value chain Downstream value chain Community	Long-term
5	Emissions and Waste Management	We set targets and management methods for the discharge of the "three wastes" (wastewater, waste gas, waste materials), reduce the generation of the 'three wastes' through technological innovation, process optimization, and equipment upgrades, and actively dispose of the 'three wastes' through legal, scientific, and safe methods.	Self-operation Community	Short-term
6	Water Resource Usage and Management	The Company sets goals and policies for water resource conservation and recycling, reduces water consumption, improves water efficiency, and increases water resource recovery rates through technological innovation, process optimization, and equipment upgrades.	Self-operation Community	Medium to long-term
7	Environmental Management System	We comply with environmental laws and regulations, establish a comprehensive environmental management system, processes, and policies, and develop response measures for environmental risk management.	Self-operation Community	Short, medium, and long term

Main Positive and Negative Impacts	Risks and Opportunities and Their Potential Financial Impacts
<p>Main Positive: The Company takes measures to protect biodiversity throughout the entire process from site selection and development to operational production, maintaining the diversity of ecosystems and species, and promoting harmonious coexistence with nature. Actively create biodiversity parks and other projects to provide new solutions for ecological governance and harmonious coexistence.</p> <p>Negative Impacts: If the Company does not fully consider biodiversity-related factors, its production and operational activities may lead to habitat destruction or degradation, threaten the survival of local flora and fauna, and disrupt the ecological balance.</p>	<p>Risks: We identify the locations of habitats that may be affected by the Company's operations at all operational sites. If the risks of project construction on biodiversity cannot be assessed, it will not only impact the ecological environment but may also bring financial risks and compliance costs.</p> <p>Opportunities: We actively promote ecological + photovoltaic integration solutions such as photovoltaic sand control and agricultural-photovoltaic complementary projects and carry out comprehensive scene design, developing targeted module products for offshore, desert, plateau, and other scenarios, while sharing biodiversity action experiences with value partners.</p>
<p>Main Positive: We actively reduce the emissions of the 'three wastes' and noise pollution to protect the surrounding air, water, and soil ecological environment. Increase the recycling rate of waste, achieve resource conservation, effectively reduce environmental damage, and protect the stability of the surrounding ecological environment and the living environment of residents' health.</p> <p>Negative Impacts: For example, discharging untreated waste or pollutants into the natural environment may lead to soil pollution or water quality deterioration, causing negative pressure on the local ecological environment and severely impacting nearby residents and ecosystems.</p>	<p>Risks: If the Company fails to comply with the local government's regulations on the proper treatment of emissions and waste, it may incur fines or penalties, leading to increased compliance costs and affecting the Company's operations and business expansion.</p>
<p>Main Positive: Through effective water resource management, continuously improve water utilization efficiency and recycling rates, reduce water intensity per unit of output, which helps conserve and protect water resources and maintain the ecological balance of water bodies.</p> <p>Negative Impacts: If effective water resource management and water-saving measures are not implemented, or if excessive water extraction occurs in areas with high water resource pressure, it will consume a large amount of water resources and cause waste, negatively impacting the ecosystem.</p>	<p>Risks: Excessive water use or waste in areas with scarce water resources may lead to insufficient water supply, which could affect project operations and future development plans.</p>
<p>Main Positive: The Company strictly adheres to environmental regulations, establishes and improves its environmental management system, actively formulates emergency plans for environmental incidents, and successfully prevents them (such as establishing an environmental management system based on ISO 14001 standards, passing independent third-party audits annually, and continuously obtaining compliance certifications, etc.), minimizing negative environmental impacts during operations.</p> <p>Negative Impacts: The lack of a comprehensive environmental management system may lead to the Company violating environmental laws and regulations, resulting in administrative penalties from regulatory authorities. Furthermore, insufficient environmental risk assessment and emergency management plans may result in significant impacts on the surrounding environment due to sudden incidents.</p>	<p>Risks: If the environmental management system is inadequate or not properly implemented, the Company may face regulatory penalties and fines due to environmental pollution. Domestic and international environmental policies are facing tightening trends, which may lead to companies undergoing high-cost systemic transformations in a short period.</p> <p>Opportunities: By optimizing the environmental management system, companies can reduce resource consumption and operational costs, attracting green consumers and responsible investors.</p>

No.	Issue	Issue Description	Scope of Impact	Impact Period
8	Product Quality and Safety	We establish relevant policies to ensure product safety and quality, improve the product quality management system, identify and manage potential quality and safety issues throughout the product and service lifecycle, and provide customers with safe and high-quality products.	Self-operation Downstream value chain	Long-term
9	Supplier Management	We identify and manage labor, environmental, and other risks among our suppliers, carry out comprehensive supplier management, responsible procurement, and critical mineral management, and work hand in hand with our suppliers to promote sustainable development across the supply chain.	Self-operation Upstream value chain Downstream value chain	Medium to long-term
10	Human Capital Development	The Company adheres to legal employment practices, prohibiting the hiring of child labor and forced labor. Focus on how companies can protect employee rights and enhance skills through training, education, health, and welfare measures, thereby improving employee satisfaction and promoting career growth, which in turn enhances the overall competitiveness and sustainability of the enterprise.	Self-operation Downstream value chain	Medium to long-term
11	Community Impact and Development	We actively carry out public welfare and volunteer service activities, engage in community communication in the fields of education, health, and emergency disaster relief, promote community development, and explore the integration of photovoltaics and industry to boost industrial development, supporting the implementation of the national rural development strategy.	Downstream value chain Community	Long-term

Main Positive and Negative Impacts	Risks and Opportunities and Their Potential Financial Impacts
<p>Main Positive: The Company launches efficient module products that meet international certification standards, ensuring product quality and safety, which helps improve the reliability and lifespan of photovoltaic power plants, creating long-term economic benefits for customers. Establish a comprehensive after-sales support system to provide customers with timely technical services and product repairs, reducing risks caused by product issues.</p> <p>Negative Impacts: Lower product quality will increase customer maintenance costs, potentially leading to module damage, resulting in resource waste and decreased customer satisfaction, which affects the Company's product image, industry reputation, and market competitiveness.</p>	<p>Risks: Product quality issues may expose companies to lawsuits, fines, and reputational damage. Constantly changing international and regional safety standards may increase compliance difficulties for businesses.</p> <p>Opportunities: By implementing high standards of product safety management to ensure product quality and safety, we can enhance brand value and market share. Improving customer satisfaction can create more market and business opportunities for repeat or long-term cooperation.</p>
<p>Main Positive: The Company integrates ESG factors into the entire process of supplier admission, evaluation, and management, optimizing supply chain management to ensure stability and sustainability, reduce environmental and social risks, advocate responsible procurement, and contribute to building a fair and sustainable global supply chain system. The Company regularly conducts compliance training for suppliers, effectively helping them improve their responsibility performance and promoting the joint development of supply chain partners.</p> <p>Negative Impacts: A lack of comprehensive supply chain management may lead to issues such as substandard product quality, non-compliance with environmental regulations by suppliers, and labor violations, which can negatively impact the environment and the industry.</p>	<p>Risks: Potential ESG issues in the supply chain (such as labor and corruption) may lead to supply chain instability, affecting the normal operation of the Company's business. At the same time, fluctuations in raw material prices can cause variations and risks in the Company's supply chain costs, and the management and supervision of suppliers (such as temporary audits and training) will also increase the Company's current and future financial costs.</p> <p>Opportunities: By enhancing compliance and ESG standards in the supply chain, companies can attract more high-quality partners. Good supply chain management contributes to the sustainability of product and service provision, promotes a stable and efficient supply chain ecosystem, and facilitates the Company's future business development.</p>
<p>Main Positive: The Company strictly complies with relevant laws and regulations, insisting on legal employment. Protect employee legal rights by regularly holding technical training and skill enhancement courses, providing a good working environment and career development opportunities, stimulating potential and creativity, and contributing to the construction of a harmonious society.</p> <p>Negative Impacts: Failure to effectively protect employees' legal rights will not only affect their basic rights, development paths, and sense of belonging to the Company, but will also exacerbate social injustice and non-compliance issues, damage the Company's image, and negatively impact the healthy development of the industry.</p>	<p>Risks: Violating human rights and labor rights (such as forced labor) may lead to compliance risks, affecting the Company's reputation and image. In the long run, if employee rights are not protected and effective development opportunities are not provided, it may result in insufficient talent skill growth, promotion barriers, internal talent loss, and reduced company productivity, which is detrimental to long-term development.</p> <p>Opportunities: By creating a positive corporate culture and caring environment, companies can enhance cohesion and employee loyalty, while skill growth among employees helps them better adapt to the rapidly changing business environment, providing a solid talent foundation for company development.</p>
<p>Main Positive: The Company actively implements the "Three Major Projects for the Benefit of the People" by improving teaching hardware facilities, providing learning materials and scholarships, conducting medical assistance, contributing to the development of rural education and healthcare, and promoting rural development and social harmony.</p>	<p>Opportunities: By proactively assuming social responsibility, companies can further deepen their connections with the community and society through public welfare activities, creating a favorable community environment for the long-term and stable operation of the business.</p>

No.	Issue	Issue Description	Scope of Impact	Impact Period
12	Promoting Industry Development	We carry out industry exchange research and active cooperation, actively participate in international initiatives and industry communication, and promote healthy competition and high-quality development through standard formulation, technical exchanges, and other means.	Self-operation Upstream value chain Downstream value chain Community	Medium to long-term
13	R&D Innovation and Intellectual Property Protection	We build a product R&D and innovation system, strengthen R&D investment, cultivate innovative talents to enhance competitiveness, improve the intellectual property management mechanism, respect and protect intellectual property, and ensure that R&D activities comply with social standards.	Self-operation	Long-term
14	Protection of Customers' Rights and Interests	We establish a comprehensive customer service guarantee system to protect customers' legal rights and interests and provide complete pre-sale, in-sale, and after-sale services, continuously improving customer satisfaction.	Downstream value chain	Long-term
15	Occupational Health and Safety	We establish a systematic occupational health and safety system to reduce the incidence of occupational diseases and work-related injuries. By conducting health and safety training, safety inspections, and health check-ups, the Company provides employees with a safe and healthy working environment.	Self-operation	Medium to long-term
16	Diversity and Equal Opportunity	We create a harmonious, diverse, and equitable workplace environment, eliminating discriminatory practices in recruitment and employment based on factors such as ethnicity, race, religious beliefs, gender, age, and sexual orientation, and ensuring gender equality and equal pay for equal work.	Self-operation Community	Medium to long-term

Main Positive and Negative Impacts	Risks and Opportunities and Their Potential Financial Impacts
Main Positive: We promote industry cooperation, actively participate in the formulation and promotion of industry standards (such as the group standards <i>Method for Measuring Square Resistance of Photovoltaic Cells Diffusion Layer</i> and <i>Recycling Grade Standards for Photovoltaic Modules</i>), conduct industry exchanges and research, assist in enhancing industry technology and management levels, and promote industry progress.	Risks: If effective interaction and cooperation among industries cannot be achieved, it may affect the future operations and long-term development of companies. Opportunities: By establishing an open cooperative ecosystem, companies can attract more partners and institutions to participate, creating a favorable business environment.
Main Positive: The Company has established a comprehensive R&D management system, management norms, and intellectual property protection and incentive systems, creating a positive environment for technological innovation and promoting the green and low-carbon upgrade of products, providing society with low-carbon products and solutions that have social value.	Risks: Infringement of intellectual property rights may affect the economic interests of companies. R&D and innovation often require significant financial investment. If projects do not yield timely returns, it may put pressure on the Company's financial situation and affect business operations. Opportunities: Through continuous innovation, the Company can maintain a leading position in technology and the market, set industry benchmarks, and attract more strategic partners and investors, helping the Company better meet the growing customer demand, especially in emerging markets such as green products, smart manufacturing, and sustainable development.
Main Positive: We build a more complete, professional, and convenient customer service network, enrich and optimize customer service channels, improve customer service quality, continuously enhance the standardization and normalization of customer service, protect customer rights, continuously improve customer satisfaction, and provide high-quality and high-standard products and services for the industry.	Risks: Issues such as untimely handling of customer complaints or service errors due to an inadequate after-sales system may damage the brand image and lead to customer loss. In addition, if technical specifications or usage restrictions are not disclosed to customers promptly, it affects their right to know and is detrimental to long-term economic development. Opportunities: Efficient after-sales service management can create a competitive advantage for the brand, helping companies further expand their customer base and enhance customer loyalty.
Main Positive: Through comprehensive occupational health and safety management, we focus on employee health and safety, actively prevent work-related injuries and occupational diseases, protect labor resources, and ensure the physical and mental health of employees (such as the Company regularly providing health check-ups, occupational disease prevention, and psychological counseling measures for employees).	Risks: If safety management is insufficient and domestic and international occupational health and safety regulations are not properly followed, the Company may face legal action, fines, damage to its reputation and financial standing, and an increased risk of workplace injuries, endangering employee safety and health.
Main Positive: The Company employs individuals from diverse cultural backgrounds, provides equal employment opportunities for people with disabilities and minorities, maintains a high percentage of female management, and offers diverse and inclusive job opportunities and work environments to promote social harmony.	Opportunities: A diverse and multifaceted talent team helps enhance corporate productivity and creativity, contributing to business growth.

No.	Issue	Issue Description	Scope of Impact	Impact Period
17	Anti-Corruption and Business Ethics	The Company strictly adheres to laws and regulations, establishing effective policies, risk prevention measures, and smooth reporting channels to uphold business ethics standards and build management systems for anti-corruption, integrity, and prevention of unfair competition.	Self-operation Upstream value chain	Medium to long-term
18	Compliance and Risk Management	We operate in compliance with laws and regulations, effectively managing various potential risks by optimizing internal compliance management and enhancing the risk prevention and control system, thereby ensuring the Company's stable and efficient operation in all aspects.	Self-operation Upstream value chain	Short, medium, and long term
19	Corporate Governance	We strictly comply with relevant laws and regulations, improve the corporate governance structure, establish governance norms and systems, fully protect the interests of a wide range of investors, and enhance the level of corporate governance.	Self-operation Upstream value chain Downstream value chain	Long-term
20	Sustainability Governance	We improve the Company's sustainability management framework, standardize the management processes related to sustainability, and organically integrate the concepts and strategies of sustainability with business operations to promote the realization of sustainable business value.	Self-operation Upstream value chain Downstream value chain	Long-term
21	Information Security and Privacy Protection	We build an information security and privacy protection system, comply with relevant laws and regulations, ensure the privacy and security of various information related to the Company, customers, employees, etc., and responsibly use relevant data.	Self-operation Upstream value chain Downstream value chain	Medium to long-term

Main Positive and Negative Impacts	Risks and Opportunities and Their Potential Financial Impacts
<p>Main Positive: Upholding the correct values and principles, the Company formulates and strictly implements anti-corruption policies, conducts corruption risk assessments, effectively prevents corruption risks, and prevents unfair competition and monopolistic behaviors, contributing to the creation of a fair, transparent, and healthy market competition and business environment.</p> <p>Negative Impacts: The lack of a comprehensive anti-corruption and business ethics management system may lead to incidents related to the Company, resulting in penalties for violations and affecting the normal operation of the Company, which is detrimental to building a good business environment.</p>	<p>Risks: If a company's supply chain partners violate business ethics, it may face legal and regulatory risks, leading to lawsuits and a crisis of public trust, resulting in financial losses and the loss of customers and partners.</p> <p>Opportunities: A well-established business ethics management system can ensure the stability of corporate compliance, increase the trust of customers and partners, and help promote long-term cooperation and profit growth.</p>
<p>Main Positive: In terms of compliance risk management for domestic and international operations, the Company strictly adheres to relevant international trade laws and regulations to ensure compliance, contributing to a favorable business and operational environment during the globalization process.</p> <p>Negative Impacts: Insufficient compliance and risk management may lead to the Company's failure to identify or respond to financial, environmental, or operational risks in advance (for example, compliance issues arising from the Company's overseas market operations due to a lack of understanding of local policies and regulatory changes, which may hinder project progress), adversely affecting the Company's healthy development within the industry.</p>	<p>Risks: Inadequate risk management may reduce the Company's overall risk response capability, resulting in financial losses, increased legal and compliance costs, and impacting business continuity and expansion capabilities.</p> <p>Opportunities: We closely monitor and analyze laws related to the compliant operations of relevant enterprises both domestically and internationally, aiming to reduce compliance costs during business expansion and create more opportunities for corporate development.</p>
<p>Main Positive: The Company has established a comprehensive corporate governance structure, creating a scientific, standardized, efficient, and clearly defined management system, which enhances the scientific nature and transparency of corporate decision-making, thereby creating long-term value for society.</p>	<p>Opportunities: By strengthening governance diversity and professionalism, companies can establish a model corporate image in domestic and international markets, attracting more investment and cooperation opportunities.</p>
<p>Main Positive: We establish a three-tier governance structure for sustainable development within the Company, introduce sustainable development indicators, regularly publish sustainability reports, standardize the management of related matters, and promote the sustainable development of the Company and society.</p>	<p>Opportunities: Systematic ESG governance can enhance the Company's market attractiveness and capital recognition, help attract and establish long-term partnerships, and bring sustainable investment and financing opportunities.</p>
<p>Main Positive: We establish and improve the information security management system, enhance IT infrastructure construction, obtain ISO 27001 information security management system certification, prevent information leakage, protect the legitimate rights and interests of individuals and organizations, and ensure the healthy development of the digital economy.</p> <p>Negative Impacts: Failure to establish a sound information security protection mechanism may lead to data leakage, which could not only result in economic losses for the Company but also trigger customer privacy-related disputes, affecting the long-term development of the Company and society.</p>	<p>Risks: Customer privacy or data leakage will bring legal and regulatory risks, reduce the Company's credibility, impact the corporate image, and may lead to actual financial losses.</p> <p>Opportunities: By implementing relevant national laws and regulations and effectively strengthening data security measures, we will enhance the trust relationship between the company and its clients, reduce compliance costs, and create long-term business development opportunities.</p>

SUMMARY OF POLICY DOCUMENTS

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JA Solar Circular Economy Strategy	↓
JA Solar Antitrust and Competition Law Global Compliance Policy	↓
JA Solar HSSE Plan	↓
JA Solar Environment Health & Safety Policy	↓
JA Solar Biodiversity Policy	↓
JA Solar Anti-Fraud Reporting Policy and Investigation Procedures	↓
JA Solar Diversity Equity & Inclusion Policy	↓
JA Solar Conflict Minerals Management Policy	↓
JA Solar Supplier Code of Conduct	↓
JA Solar Whistleblower Protection and Integrity Reporting Policy	↓
JA Solar Code of Conduct	↓
JA Solar Environmental, Social, and Governance (ESG) Sustainability Policy	↓
JA Solar Responsible Sourcing Policy	↓
JA Solar Human Rights Policy	↓



INDEPENDENT ASSURANCE OPINION STATEMENT

Statement No: SRA-825273

JA Solar Technology Co., Limited

Sustainability & Environmental, Social, and Governance ("ESG") Report 2024

The British Standards Institution is independent of JA Solar Technology Co., Limited and its subsidiaries (hereinafter referred to as "JA Solar" collectively in this statement) and has no financial interest in the operation of JA Solar other than for the assessment and assurance of JA Solar Sustainability & Environmental, Social, and Governance Report 2024 (the "Report").

This independent assurance opinion statement is prepared on the basis of review by the British Standards Institution of the Report presented by JA Solar. The review does not extend beyond such information and is solely based on it. In performing such review, the British Standards Institution has assumed that all such information is complete and adequate.

Scope

The scope of engagement agreed upon with JA Solar includes the following:

1. The assurance scope is consistent with the description of the Report. The Report is prepared in accordance with the No. 17 Self Discipline and Supervision Guide of Listed Companies in Shenzhen Stock Exchange-Sustainability Report (Pilot) ("SZSE ESG Guideline"), with reference to the Global Reporting Initiative ("GRI") Universal Standard 2021 (GRI Standard 2021), UN Sustainable Development Goals (SDGs), Ten Principles of United Nations Global Compact (UNGC), the International Sustainability Standards Board's ("ISSB") IFRS® Sustainability Disclosure Standards and European Sustainability Reporting Standards (ESRS).
2. In accordance with Type 2 Moderate Level of Assurance as defined in the AA1000 Assurance Standard V3 ("AA1000AS V3"), BSI evaluates the nature and extent of JA Solar' adherence to the four reporting principles of Inclusivity, Materiality, Responsiveness and Impact in preparing the Report. The reliability of specified sustainability performance information and data disclosed in the Report has also been evaluated.

Opinion Statement

We conclude that the Report provides a fair view of JA Solar' sustainability plan and performance in the reporting year. The Report subject to assurance is free from material misstatement based upon evaluation within the limitations of the scope of the assurance, the information and data of JA Solar group provided by JA Solar and the samples taken. Based on our work carried out during the assurance process, nothing has come to our attention that causes us to believe that data and information stated in the Reporting Organization's Report is not correctly presented and that Inclusivity, Materiality, Responsiveness and Impact based on AA1000 criteria are not correctly addressed. We believe that the environmental, social and governance general disclosures and key performance indicators are fairly represented in the Report, in which JA Solar' efforts to pursue sustainable development are recognized by its stakeholders.

Our work was carried out by a team of sustainability report assurers in accordance with the AA1000AS V3. We planned and performed this part of our work to obtain the necessary information and explanations. We considered JA Solar has provided sufficient evidence to support its self-declaration of compliance with SZSE ESG Guideline, with reference to GRI Standard 2021, UN SDGs, Ten Principles of UNGC, ISSB Standards and ESRS is fairly stated and the Report is considered acceptable in meeting the principles as set out in AA1000 AccountAbility Principles 2018 ("AA1000AP (2018)").

For and behalf of BSI:



Issue Date: 2025-04-22


Michael Lam, Senior Vice President, APAC Assurance
...making excellence a habit.™

Page: 1 of 3

Effective Date: 2025-04-22

The British Standards Institution is independent to the above named client and has no financial interest in the above named client. This Opinion Statement has been prepared for the above named client only for the purposes of verifying its statements relating to its ESG more particularly described in the scope. It was not prepared for any other purpose. The British Standards Institution will not, in providing this Opinion Statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used or to any person by whom the Opinion Statement may be read. This Opinion Statement is prepared on the basis of review by The British Standards Institution of information presented to it by the above named client. The review does not extend beyond such information and is solely based on it. In performing such review, The British Standards Institution has assumed that all such information is complete and accurate. Any queries that may arise by virtue of this Opinion Statement or matters relating to it should be addressed to the above name client only.

Statement No: SRA-825273

Methodology

- Our work was designed to gather evidence on which to base our conclusion. We undertook the following activities:
- A top level review of issues raised by external parties that could be relevant to JA Solar’ policies to provide a check on the appropriateness of statements made in the Report.
 - Discussion with staff on JA Solar’ approach to stakeholder engagement. We had no direct contact with external stakeholders during this assurance process.
 - Interview with staff involved in ESG management, report preparation and provision of report information.
 - Review of key organizational developments.
 - Review of supporting evidence for claims made in the Report, and
 - An assessment of JA Solar’ reporting and management processes concerning reporting against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000AP (2018).

Conclusions

A review of the Report issued by JA Solar against the AA1000AS V3 principles of Inclusivity, Materiality, Responsiveness and Impact, as well as the SZSE ESG Guideline, GRI Standard 2021, UN SDGs, Ten Principles of UNGC, ISSB Standards and ESRS is set out below: Based on the procedures performed and evidence obtained, we believe that data and information stated in the Reporting Organization’s Report is correctly presented and that Inclusivity, Materiality, Responsiveness and Impact based on AA1000 criteria are correctly addressed.

Although BSI reviews all 2024 ESG data indicators within our Sustainability Data Transparency Index (“SDTI”) as part of our assurance process, specific attention and further review was paid to the following data points:

Key Performance Indicators	Primary Indicators	Secondary Indicators
Energy Management	Energy Consumption	Natural Gas, Diesel, Motor Gasoline, LPG, LNG, Heating, Electricity
Emissions and waste management	Waste	Total Hazardous waste Amount of hazardous recycled Total Non-hazardous waste Amount of non-hazardous recycled
	Other significant gas emissions	Fluoride
Water Resources use and management	Water withdrawal	Total water withdrawal
	Water Discharge	Total Wastewater discharge
	Water Consumption	Total Water Consumption
	Ultra Pure water	Ultra Pure water consumption
Combating Climate Change	Greenhouse Gas (GHG) emissions	Direct GHG emissions (Scope 1), Indirect GHG Emissions from imported energy (Scope 2)
Employment	Number of employees	Number of employees (By gender, age, employee category, location)
Occupational Health and Safety	Occupational injuries	Number of Employee Deaths due to Work-related Injuries, Lost-Time Injury Frequency Rate (LTIFR)
Supply Chain Management	Negative Environmental Impacts in the Supply Chain and actions taken	Number of Suppliers that Have Undergone Social and Environmental Impact Assessment Number of Suppliers Identified for Having Actual and Potential Significant Negative Environmental Impacts Number of Suppliers Identified for Having Actual and Potential Significant Negative Social Impacts

We considered JA Solar has provided sufficient evidence that its self-declaration of compliance with SZSE ESG Guideline, with reference to GRI Standard 2021, UN SDGs, Ten Principles of UNGC, ISSB Standards and ESRS is fairly stated and the Report is considered acceptable in meeting the principles as set out in AA1000AP (2018).

Statement No: SRA-825273

Assurance Level

The Type 2 Moderate Level of Assurance provided in our review is defined by the scope and methodology described in this statement.

Responsibilities

It is the responsibility of JA Solar’ senior management to ensure that the information being presented in the Report is accurate. Our responsibility is to provide an independent assurance opinion statement to stakeholders giving our professional opinion based on the scope and methodology described.

Ability and Independence

The assurance team was composed of Lead Assuror and Assuror, who are experienced in the industrial sector, and trained in a range of sustainability, environmental and social standards including GRI Series Standards, AA1000, SZSE ESG Guideline, HKEX Environmental, Social and Governance Reporting Guide, ISO 14064, ISO 14001, ISO 50001, ISO 45001, ISO 9001, etc.

British Standards Institution is a leading global standards and assessment body founded in 1901. The assurance is carried out in line with the BSI Fair Trading Code of Practice.

GREENHOUSE GAS VERIFICATION STATEMENT

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Statement of Conformity CN25/00002484



Greenhouse Gas Verification Statement

The inventory of Greenhouse Gas emissions in
01 Jan. 2024 to 31 Dec. 2024 of

JA Solar Technology Co., Ltd.

Business address: No.123 Xinxing Road, Ningjin County, Hebei Province, P.R. China
Organization boundary: Detail organization boundary information has been listed in Annex,
for multi-site statement

has been verified in accordance with ISO 14064-3:2019 as meeting the requirements of

ISO 14064-1:2018

Direct Emissions

107,171 tonnes of CO₂e

Indirect Emissions

35,454,451 tonnes of CO₂e (Market-based)

Total Emissions Quantified

35,561,622 tonnes of CO₂e (Market-based)

The specific categories of indirect greenhouse gas emissions are detailed in the
appendix of this statement, which is an integral part of this statement

Authorised by
David Xin
Sr. Director - Business Assurance
DATE: 13 Apr. 2025

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SGS has been contracted by JA Solar Technology Co., Ltd. (hereinafter referred to as "CLIENT"),
for the verification of direct and indirect Greenhouse Gas emissions in accordance with

ISO 14064-3:2019

as provided by JA Solar Technology Co., Ltd. (hereinafter referred to as "RESPONSIBLE
PARTY"), in the Greenhouse Gas (GHG) Assertion in the form of GHG Report covering GHG
emissions of the period 01 Jan. 2024 to 31 Dec. 2024 (hereinafter referred to as "REPORT
PERIOD").

Roles and responsibilities

The management of the RESPONSIBLE PARTY is responsible for the organization's GHG
information system, the development and maintenance of records and reporting procedures in
accordance with that system, including the calculation and determination of GHG emissions
information and the reported GHG emissions.
It is SGS's responsibility to express an independent GHG verification opinion on the GHG
statement as provided by the RESPONSIBLE PARTY for the REPORT PERIOD.

According to ISO 14064-3:2019, SGS has conducted a third-party verification of the provided GHG
statement by RESPONSIBLE PARTY against the requirements of ISO 14064-1:2018 in the period
29 Mar. 2025. The verification is based on the verification scope, objectives and criteria as agreed
between the CLIENT and SGS on 11 Mar. 2025.

Level of Assurance

The level of assurance agreed is that of Reasonable assurance.

Scope

The CLIENT has commissioned an independent verification by SGS in accordance with
ISO 14064-3:2019 to assure the reported GHG emissions of RESPONSIBLE PARTY, in
conformance with ISO 14064-1:2018 requirements within the scope of the verification as outlined
below. The data and information supporting the GHG statement are historical in nature.

This engagement covers verification of emission from anthropogenic sources of greenhouse gases
included within the organization's boundary:

- The organizational boundary is established following Operational control approach.
- Location/boundary of the activities: detail boundary information has been listed in Annex.
- Physical infrastructure, activities, technologies and processes: Production, processing,
and sales of monocrystalline silicon rods, monocrystalline silicon wafers, photovoltaic
modules, solar cells, etc.
- GHG sources, sinks and/or reservoirs included: GHG sources as presented in the GHG
inventory and report of the RESPONSIBLE PARTY.
- Types of GHGs included: CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃.
- GHG information for the following period was verified: 01 Jan. 2024 to 31 Dec. 2024.
- GWP adopted: IPCC 6 Assessment Report.
- Intended user of the verification statement: Client/Group/Internal use.

Objective

The purposes of this verification exercise are, by review of objective evidence, to independently
review:

- Whether the GHG emissions are as declared by the organization's GHG statement
- The data reported are accurate, complete, consistent, transparent and free of material
error or omission.



Criteria

Criteria against which the verification assessment is undertaken are the requirements of ISO 14064-3:2019.

Materiality

The materiality required of the verification is considered by SGS to be 5%, based on the needs of the intended user of the GHG statement.

Verification approach

SGS's approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions information and the controls in place to mitigate these. Our examination includes assessment of evidence relevant to the amounts and disclosures in relation to the organization's reported GHG emissions.

We plan and perform our work to obtain the information, explanations and evidence that we considered necessary to provide a reasonable level of assurance that the GHG emissions for the REPORT PERIOD are fairly stated.

We conduct our verification with regard to the GHG statement of GHG Report of the RESPONSIBLE PARTY which includes assessment of GHG information system and reporting plan/protocol. This assessment includes the collection of evidence supporting the reported data, and checking whether the provisions of the protocol reference, are consistently and appropriately applied.

Verification opinion conclusion

The RESPONSIBLE PARTY provided the GHG statement based on the requirements of ISO 14064-1:2018 that total emission 35,561,622 tonnes of CO₂e (Market-based) in the organization boundary for the REPORT PERIOD.

The verification opinion as below is issued by SGS after an independent verification for RESPONSIBLE PARTY's GHG statement base on agreed Reasonable assurance:

☒ Unmodified

The GHG statement submitted by RESPONSIBLE PARTY is prepared in accordance with ISO 14064-1:2018 on GHG quantification and reporting, is a fair representation materially, the GHG data and information in the statement are explicit and supported by adequacy and appropriate evidence.

☐ Modified

The GHG statement submitted by RESPONSIBLE PARTY has no material misstatement, however has some deficiencies which will prevent the issuance of unmodified verification opinion.

☐ Adverse opinion

The GHG statement submitted by RESPONSIBLE PARTY:

- has material misstatement or
- there is insufficient or inappropriate evidence to support an unmodified or modified opinion.

☐ Disclaiming the issuance of an opinion

It is unable to obtain sufficient and appropriate objective evidence to form an opinion as to whether the GHG statement submitted is presented fairly in accordance with ISO 14064-1:2018

This statement shall be interpreted with the GHG statement of GHG Report of the RESPONSIBLE PARTY as a whole.



Note: This Statement is issued by SGS-CSTC Standards Technical Services Co., Ltd. ("SGS") under its General Conditions for Greenhouse Gas Validation & Verification Services. The findings recorded hereon are based upon a verification performed by SGS. A full copy of this statement, the findings and the supporting GHG Assertion may be consulted from RESPONSIBLE PARTY. This Statement does not relieve Client from compliance with any by laws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client. The verification statement of greenhouse gases is concluded in English. Any translation differences, the English version shall prevail.

Appendix A: List of Organizational Boundaries

List of Organizational Boundaries

Organization name	Description of organizational boundary
JA Solar Technology Co., Ltd.	No.123 Xinxing Road, Ningjin County, Hebei Province, P.R. China
Yiwu JA Solar Technology Co., Ltd	No.165 Tongze Road, Yiting Town, Yiwu City, Zhejiang Province, P.R. China
Shanghai JA Solar Technology Co., Ltd.	No.118, Lane 3111, Huancheng West Road, Fengxian District, Shanghai City, P.R. China
Shanghai JA Waylion New Material Technology Co., Ltd.	Building 6, No.118, Alley 3111, Huancheng Rd. (West), Fengxian District, Shanghai City, P.R. China
Baotou JA Solar Technology Co., Ltd.	No.21 Equipment Avenue, Equipment Park New Planning Area, Qingshan District, Baotou City, Inner Mongolia Autonomous Region, P.R. China
JA Solar Technology Yangzhou Co., Ltd	No.1 Jinhui Road, Yangzhou Economic and Technological Development Zone, Jiangsu Province, P.R. China
JA Solar New Energy Yangzhou Co., Ltd.	No.1 Jinhui Road, Yangzhou Economic and Technological Development Zone, Jiangsu Province, P.R. China No.123 Jinshan Road, Yangzhou Economic and Technological Development Zone, Jiangsu Province, P.R. China
Qujing JA Solar PV Technology Co., Ltd	South of Nanhai Avenue and East of Photovoltaic Road No.1 in Qujing Economic and Technological Development Zone, Yunnan Province, P.R. China
Qujing JA Solar Technology Co., Ltd	North of Nanhai Avenue and East of Shaoxi Road, Qujing Economic and Technological Development Zone, Qujing City, Yunnan Province, P.R. China
Other branches based on operational control rights not listed, please refer to the greenhouse gas emission inventory for details	

Appendix B Greenhouse Gas Emissions Inventory (ISO14064-1:2018)



Greenhouse Gas Emissions Inventory (ISO14064-1:2018)		
Organization name	JA Solar Technology Co., Ltd.	
Organizational boundary	See Appendix A for details	
Reporting period	01 Jan. 2024 to 31 Dec. 2024	
Report boundary		Greenhouse gas emissions (Unit: tonnes of CO ₂ e)
Category		
Direct GHG emissions	Category 1 direct GHG emissions	107,171
Indirect GHG emissions	Category 2 indirect GHG emissions from imported energy	4,445,010 (Location-based) 3,220,788 (Market-based)
	Category 3 indirect GHG emissions from transportation	1,073,314
	Category 4 indirect GHG emissions from products used by organization	31,010,009
	Category 5 indirect GHG emissions associated with the use of products from the organization	150,340
	Category 6 indirect GHG emissions from other sources	0

Appendix C Greenhouse Gas Emissions Inventory (GHG protocol)



Greenhouse Gas Emissions Inventory (GHG protocol)		
Organization name	JA Solar Technology Co., Ltd.	
Organizational boundary	See Appendix A for details	
Reporting period	01 Jan. 2024 to 31 Dec. 2024	
Operational boundaries		Greenhouse gas emissions (Unit: tonnes of CO2e)
Category		
Scope1 direct GHG emissions		107,171
Scope2 indirect GHG emissions from imported energy		4,445,010 (Location-based) 3,220,788 (Market-based)
Scope3 other indirect GHG emissions	Category1-Purchased goods and services	27,778,243
	Category2-Capital goods	2,775,785
	Category3-Fuel- and energy-related activities (not included in scope1 and scope2)	414,770
	Category4-Upstream transportation and distribution	959,120
	Category5-Waste generated in operations	12,336
	Category6-Business travel	10,506
	Category7-Employee commuting	42,206
	Category8-Upstream leased assets	28,875
	Category9-Downstream transportation and distribution	61,482
	Category10-Processing of sold products	59,381
	Category11-Use of sold products	/
	Category12-End-of-life treatment of sold products	61,035
	Category13-Downstream leased assets	254
	Category14-Franchises	/
	Category15-Investments	29,670

JA SOLAR TECHNOLOGY CO., LTD.

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JA SOLAR SUSTAINABILITY AND ESG REPORT 2024

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