Trinasolar

2023
Sustainability Report

Trina Solar Co., Ltd.
stock code: 688599

Power Beyond Solar

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About the Report

Introduction of the Report

Trina Solar Co., Ltd (hereinafter referred to as "Trinasolar", "the Company" or "we" or "us") is committed to leading the way in smart solar energy and storage solutions, and has always focused on sustainable development. Since 2011, the Company has been preparing and publishing sustainability/social responsibility reports, and expected to providing transparent corporate sustainability-related information to our stakeholders - shareholders, potential investors, customers, government and regulatory authorities, employees, suppliers and partners, communities and non-governmental organizations, and the media. The previous report was published in April 2023, and 2023 Sustainability Report was published on 26 April 2024 together with the Company's Annual Report.

Trinasolar's Sustainability Report is published on an annual basis, in line with the financial year. The reporting period is from January 1, 2023 to December 31, 2023 (hereinafter referred to as the "Reporting Period"), and the contents of the Report detail Trinasolar's practices and performance in the areas of economy, environment, society and corporate governance during the Reporting Period. In order to reflect the consistency, comparability and completeness of the Report, the contents of the Report appropriately refer back to previous years or cover the year 2024.

Reporting Scope

The Report covers Trinasolar's global plants and operating business units over which the Company has direct operational control (see table on right). Any inconsistencies between the scope of specific data and the Report will be noted in the text.

Reporting Standards and Guidelines

The Report complies with the requirements of the Shanghai Stock Exchange (SSE)'s "Notice on Strengthening the Work of Social Responsibility of Listed Companies and Issuing Guidelines on Environmental Information Disclosure of Listed Companies on the SSE", and "Report of Companies Fulfilling Social Responsibility". In addition, the Report refers to the reporting disclosure requirements of the latest Global Reporting Initiative (GRI) Standards 2021 and the reporting framework of the Task Force on Climate-Related Financial Disclosures (TCFD).

Data Source

The source of data used in the Report include Trinasolar's internal relevant statistics, public reports or reports, and third-party audited data. Unless otherwise specified, the monetary units involved in the report are all in RMB. The Board of Directors of Trinasolar guarantees that there are no false records, misleading statements or material omissions in the Report.

Company Full Name	Company Abbreviation
Trina Solar Co., Ltd.	Trina Solar
Trina Solar (Changzhou) Science & Technology Co., Ltd.	Changzhou Technology
Yancheng Trina Solar Guoneng Science & Technology Co., Ltd.	Yancheng Guoneng
Trina Solar (Suqian) Technology Co., Ltd.	Suqian Technology
Trina Solar Yiwu Technology Co., Ltd.	Yiwu Technology
Trina Solar (Suqian) Optoelectronics Co., Ltd.	Suqian Optoelectronics
Trina Solar (Yancheng Dafeng) Co., Ltd.	Yancheng Dafeng
Trina Solar Technology (Yancheng) Co., Ltd.	Yancheng Technology
Trina Solar Science & Technology (Thailand) Co., Ltd.	Thailand factory
TRINA SOLAR ENERGY DEVELOPMENT COMPANY LIMITED	Vietnam Taiyuan factory
Trina Solar (Huaian) Technology Co., Ltd.	Huaian Technology
Trina Solar (Huaian) Optoelectronics Co., Ltd.	Huaian Optoelectronics
Inner Mongolia Tiansheng New Technology Co., Ltd	Zhunger Banner Module
Trina Solar (Yancheng) New Energy Co., Ltd.	Yancheng New Energy
Trina Solar (Qinghai) Technology Co., Ltd.	Qinghai Technology
Trina Solar (Qinghai) Optoelectronics Co, Ltd.	Qinghai Optoelectronics
Trina Solar (Qinghai) Photovoltaic Materials Co., Ltd.	Qinghai Wafer
Trina Solar (Qinghai) Crystal Silicon Co., Ltd.	Qinghai Crystal Silicon
Trina Solar (Suqian) Silicon Materials Co., Ltd.	Suqian Wafer
Trina Energy Storage (Chuzhou) Co., Ltd.	Chuzhou Energy Storage
Trina Energy Storage Solutions (Jiangsu) Co., Ltd.	Trina Energy Storage
TRINA SOLAR (VIETNAM) WAFER COMPANY LIMITED	Vietnam Crystal Silicon
NCLAVE MANUFACTURING S.L.U.	Viana factory

Access to the Report

The Report is published in electronic form, and you can download the English and Chinese versions of the Report from Trinasolar's official website https://www.trinasolar.com/en-glb/our-company/sustainability-downloads.

Your comments or suggestions are important to us. If you have any questions or suggestions about the Company's sustainability disclosures and performance, you can email us at ESG@trinasolar.com.

Chairman's Message

As the world moves steadily towards a sustainable future, green energy and environmental innovation have become critical drivers in shaping the world of tomorrow. Under this global trend, Trinasolar is leading the way in the global energy revolution with technological innovations and sustainable development strategies. We utilize green technology products to advance global low-carbon development and join hands with our global partners to create a beautiful new zero-carbon world.

The Company has been practicing six key strategies of "innovation, branding, globalization, platformization, intellectualization, and industry-finance synergy" to lead the development of the industry. In 2023, our business was generally on an upward trend, and we have gained increasing trust from our global customers and all sectors of society. During the Reporting Period, Trinasolar realized total operating income of 113.39 billion RMB in 2023, eclipsing the 100 million RMB mark for the first time. The shipment of Trinasolar's photovoltaic products increased by 50% year-on-year. By the end of 2023, the cumulative shipment of Trinasolar's photovoltaic modules globally exceeded 190 GW+, equivalent to planting about 14 billion trees around the world. The cumulative shipment of 210 Vertex modules exceeded 105 GW, topping the list globally.

As a key high-tech enterprise, Trinasolar actively promotes China's photovoltaic industry towards a higher level, and strives to be the pathfinder, leader and defender of the high-quality development of the industry. We continue to refine our technology, develop new quality productive forces based on local conditions, and attach great importance to the intellectual property protection to create an enabling environment for collaborative innovation. We make further efforts to promote the joint establishment of the National Key Laboratory of Photovoltaic Science and Technology. We have successfully brought together 18 other upstream and downstream enterprises in the industrial chain to establish the Photovoltaic Manufacturing Innovation Center, delivering value to our customers with high-quality products and services. We cooperate with upstream and downstream partners to carry out industrial ecological cooperation on a global scale, providing support to enhance the resilience and security of the industry chain and supply chain. We also form the Open Innovation Ecological Alliance to lead the industry, contributing our efforts to the sustainable development of the photovoltaic industry.

Trinasolar is both a producer of green energy and a practitioner of green development. The Company attaches great importance to the control of the environmental impacts and has formulated and implemented an environmental protection management system throughout the entire lifecycle from product research and development, raw material procurement, production and manufacturing, and energy resource utilization to waste management. Our Vertex N 700W, Vertex N 610W and Vertex 670W modules have successfully passed the UL Environmental Product Declaration (EPD) certification and achieved mutual recognition with EPD Italy, which has promoted the upgrade to "700W+ Photovoltaic Open Innovation Ecological Alliance". In 2023, Yiwu production base of Trinasolar obtained the Zero-Carbon Factory (Type I) Certificate, becoming the first Zero-Carbon Factory certified by an authoritative agency in the photovoltaic industry. Also in 2023, Trinasolar's Suqian production base was recognized as a National Green Factory. In addition, Trinasolar becomes the first enterprise in the photovoltaic industry to hold the national titles of both "innovative" and "green" supply chain.

Trinasolar achieved total revenue of **113.39** billion RMB in 2023

The shipment of Trinasolar's photovoltaic products increased by **50%** year-on-year.

Gao Jifan
Chairman and CEO of Trinasolar

Attaching great importance to employee development, Trinasolar has established a sound long-term incentive mechanism within the Company, intending to drive the mutual growth of the Company and our people. We provide all employees with professional training courses, continuously improve our performance-based remuneration system and welfare system, and establish a leading occupational health and safety management system to enhance their sense of belonging and happiness. We take social responsibility as our responsibility, actively participating in social welfare projects, empowering the revitalization of green villages, and contributing to employment and economic development.

The Company continues to enhance compliance and risk management and has incorporated Environmental, Social and Governance (ESG) factors into decision-making and daily operations. By doing so, we continuously improve our corporate governance and supervision as well as the resilience of our operations and management, thus facilitating our sustained and sound development and enhancing our competitiveness. In 2023, Trinasolar received accolades such as the "Decarbonisation Leader" award from the European Union Chamber of Commerce in China, the Forbes China Top 50 Sustainable Development Industrial Enterprises, and the only photovoltaic company listed in the Top 30 ESG Excellence Practices in China.

Looking forward, Trinasolar will not forget our original aspiration and stick to the corporate mission of "Solar Energy for All". We will make every effort to be the global leader in smart solar energy and storage solutions and work together to build and embrace the high-quality development of China's photovoltaic industry, contributing to a low-carbon, high-efficiency, and sustainable future.

the cumulative shipment of Trinasolar's photovoltaic modules globally exceeded **190** GW, **equivalent to planting about 14 billion trees around the world**

The cumulative shipment of 210 Vertex modules exceeded **105** GW, **topping the list globally**

About Trinasolar

Company Profile

Founded in 1997, Trina Solar Co., Ltd. (stock symbol: Trinasolar; stock code: 688599) is mainly engaged in photovoltaic (PV) products, PV systems and smart energy. PV products include R&D, production and sales of PV modules. PV systems consist of power stations and system products. Smart energy mainly comprises PV power generation and operation & maintenance, smart solutions for energy storage, smart microgrid, and development and sales of multi-energy systems. We are committed to leading the way in smart solar energy and storage solutions and facilitating the transformation of new power systems for a net-zero future. On June 10, 2020, Trinasolar was listed on the Science and Technology Innovation Board (STB) of the Shanghai Stock Exchange, becoming the first PV company to be listed on the STB covering PV products, PV systems and smart energy.

Globalization is Trinasolar's strategy. The Company is fully committed to promoting a higher level of globalization and the integration of the "innovation chain, industrial chain, capital chain and talent chain". We have set up regional headquarters in Zurich, Fremont (Silicon Valley), Miami, Singapore, Dubai, UAE, as well as offices and branch offices in Australia, South Korea, India, the UAE, Turkey, Italy, Germany, Spain, the UK, South Africa, Brazil, Chile, Colombia, and Mexico, and overseas manufacturing bases in Thailand and Vietnam. In recent years, Trinasolar has introduced international high-level management and R&D talents from more than 70 countries, and the business has spread to more than 170 countries around the world.

Trinasolar's global business distribution

Business Segments

Photovoltaic Products

High-efficiency modules: 210 Ultra-High Power Module, significantly lowering project costs

TrinaTracker: An efficient product in the age of affordable photovoltaics

Project Business

Utility: Rich experience in global power plant development and construction

Intelligent distributed power solutions: Residential original PV systems and commercial and industrial original PV systems.

Intelligent energy storage solutions: TrinaStorage, a global provider of integrated energy storage products and system solutions

Our Sustainability Management

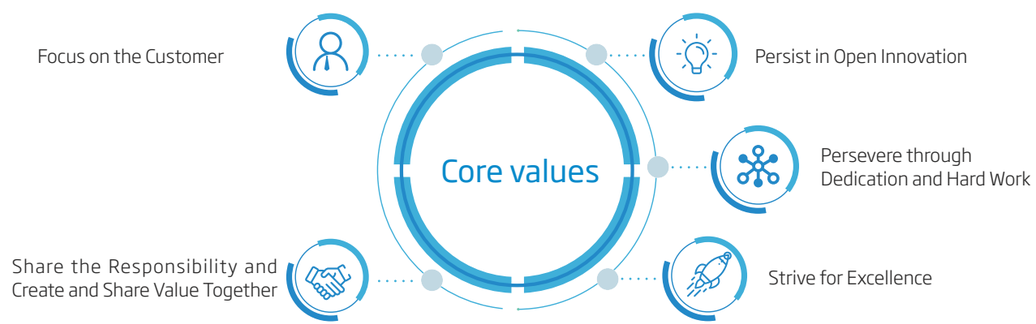
Mission and Values

Corporate Mission

Solar Energy for All

Vision 2035

Leading the way in smart solar energy and storage solutions and facilitating the transformation of new power systems for a net-zero future.



Sustainability Management Culture

Trinasolar adheres to the sustainability vision of "Solar Energy for All", and builds a unique Trinasolar sustainability management culture.

Our "SOLAR" sustainability management culture has a profound meaning in each letter: S stands for Sustainability, reflecting the Company's commitment and efforts in climate action, energy efficiency and the circular economy; O stands for Optimization, which expresses our desire to continuously improve operational efficiency and supply chain management through technological innovation and management reform; L stands for Leading, which implies that Trinasolar hopes to maintain the Company's technological and market leadership position in the PV industry; A stands for Action, which covers the Company's goals of ESG compliance, risk management, product resilience, and eco-creation; R stands for Responsibility, reflecting Trinasolar takes the initiatives to shoulder the responsibilities to the environment, society and stakeholders, and to realize shared value and harmonious coexistence. Through this management culture, the Company aims to work together with internal and external stakeholders towards a sustainable future.

Trinasolar's Sustainability Management Culture

	S	O	L	A	R
	Sustainability	Optimization	Leading	Action	Responsibility
Pillar contribution	✓ Drive climate action to enhance environmental management ✓ Improve energy efficiency ✓ Emphasize circular economy and waste management	✓ Optimize governance and management structure ✓ Optimize supply chain management ✓ Reduce consumption with smart manufacturing technologies ✓ Improve logistics and operational efficiency	✓ Maintain technology and market leadership in the PV industry ✓ Promote industry standards through R&D innovation ✓ Invest in new technologies to be forward-looking	✓ Adhere to ESG compliance ✓ Identify and respond to ESG risks and opportunities ✓ Enhance product resilience to climate change ✓ Create industry chain ESG ecology and win-win future	✓ Take corporate responsibility ✓ Promote public charity ✓ Lead community cooperation and environmental awareness ✓ Cultivate international talents ✓ Safeguard employee rights and benefits
Key issues	Environmental Compliance Carbon Emissions Management	Supply Chain Management	Employee Training and Development	Compliant Operation Stakeholder Communication	Employee Rights and Benefits Anti-Corruption and Business Ethics

Sustainability Vision

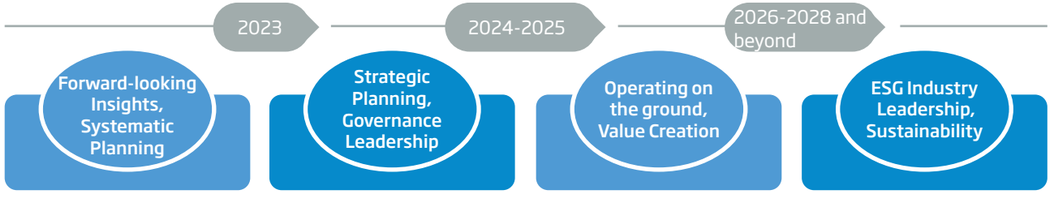
Solar Energy for All

ESG Governance Culture

Preservation	Innovation	Win-win
Remember the concept and keep the bottom line	Pioneer and create value	Lead green development and win-win cooperation

Trinasolar aspires to lead the global smart solar energy and storage solutions industry in ESG and sustainability, and has developed clear sustainability plans and milestones for this purpose. From 2023 to 2028 and beyond, the Company will progress step by step through the stages of "Forward-looking Insight", "Strategic Planning", "Governance Leadership", "Operating on the Ground and "Value Creation" to achieve our mission.

Trinasolar's Sustainability Plan



On the environmental front, the Company is committed to carbon emissions management and strictly enforces environmental compliance targets. We contribute to environmental protection by continuously achieving milestones of emission reduction and ultimately realizing Zero-Carbon Trinasolar.

In the social aspect, we pay attention to the rights and welfare of employees, provide a good working environment and welfare benefits to enhance employee satisfaction; at the same time, we attach importance to employee training and development, cultivate professionals, and promote the personal growth of employees and the development of the enterprise. The Company is committed to sustainable supply chain management, enhancing the stability, resilience and sustainability of the supply chain.

In terms of corporate governance, the Company adheres to the principle of compliance, and has a "zero tolerance" attitude for the misconducts of corruption and business ethics. We continuously improve the compliance management capability to ensure the legality and transparency of business activities. We strengthen communication with stakeholders, establish effective communication channels, and promote interactions and cooperation among stakeholders, through which the Company's social responsibility and reputation would be enhanced.

By establishing a sustainability plan and continuously tracking the progress of goal achievement, Trinasolar will continue to enhance the comprehensive competitiveness and realize sustainable development.

Sustainability Governance

ESG Management System

Trinasolar's ESG management system is designed to continuously improve the ESG organizational structure, including the establishment of a dedicated ESG management organization and team with clear responsibilities and authorities. We have established a sound ESG management system covering policies, processes, guidelines, etc., to ensure that ESG objectives are implemented. At the same time, we are committed to developing an effective ESG performance appraisal system, assessing ESG performance on a regular basis and setting targets for improvement.

The Company continuously improves the quality of ESG information disclosure to enhance transparency and trust, and utilizes technological empowerment, such as data analysis and monitoring systems, to enhance the efficiency and effectiveness of ESG management. In addition, we focus on continuously optimizing internal and external monitoring mechanisms, including independent audits and stakeholder engagement, to ensure ESG management is compliant and effective.

ESG Governance Structure

With the aim of enhancing the overall ESG operational efficiency, Trinasolar has developed a four-tier ESG governance structure covering the governance, management, execution and supervision, with the responsibilities clearly defined.

The Board of Directors serves as the governance level, which is responsible for making decisions on ESG strategic directions. ESG Management Committee, the management body of the Company's sustainable development, which consists of the leaders of key ESG departments and business divisions, is responsible for formulating and approving relevant policies and targets to ensure that ESG strategies are put into practice. ESG relative departments serve as execution to incorporate the ESG concepts in daily business activities. In addition, we have set up an independent supervisory department and built an internal three-line defense mechanism to ensure the compliance and effectiveness of ESG management through internal audits and external third-party independent verification, so as to strongly guarantee that the Company fulfills the ESG commitments.

Trinasolar Sustainability Governance Structure

Governance	**Board of Directors**	The highest responsible and decision-making body for ESG management, deciding on ESG strategy and medium- and long-term planning.
Management	**ESG Management Committee**	Formulate ESG strategic planning and annual work plan; coordinate, guide, supervise and make decisions on major ESG matters and issues, and supervise the operation of ESG management system.
Executive	**Each ESG Undertaking Department**	Effectively implement ESG management processes; formulate implementation paths and annual plans based on ESG medium and long-term planning; implement ESG management pathways, and ensure the achievement and continuous improvement of phase-by-phase targets and ESG performance.
Supervision	**Three Lines of Defence**	Internal audit and external assurance bodies safeguard the independence and effectiveness of oversight.

Board Statement

The Board of Directors places sustainable development as the core mission. To realize sound and sustainable development and enhance corporate resilience, the Board of Directors has built a rigorous ESG governance system, placed a strong emphasis on in-depth supervision and active involvement in ESG issues, and firmly fulfilled social responsibilities.

ESG Governance

Trinasolar's General Meeting of Shareholders, Board of Directors and Supervisory Committee, representing the shareholders, the Company's management and the supervisory body, respectively, work together to supervise the Company's operations and decision-making. The bodies safeguard shareholders' rights and interests, ensure the Company's compliant operations, and promote the Company's sound and long-term development. The Board of Directors is in charge of ESG governance and assumes full responsibility for the development of ESG strategies and policies. At the management level, the ESG Management Committee is responsible for approving ESG goals, policies, and strategies, reviewing progress on a regular basis, and reporting important matters to the Board of Directors. At the execution level, each business department is responsible for the specific implementation of ESG processes to ensure the effective execution of ESG management and the achievement of relevant goals.

Material Issues and ESG Risk Management

The Company places great emphasis on ESG risk management, updating ESG issues every year. Through a rigorous materiality assessment, which includes in-depth Board discussions, extensive stakeholder surveys, and expert evaluations, the Company is able to make a thorough analysis of the annual material issues, which would be formally confirmed through an approval process. In response to significant ESG risks such as climate change, the Company regularly organizes senior management to have panel discussions to deliberate and adopt appropriate risk response strategies and measures. As such, we could address ESG challenges effectively and continue to drive sustainable development.

ESG goals

The Board of Directors closely monitors and is deeply involved in the setting of ESG goals, regularly reviewing, discussing, and adjusting them as needed. By comparing these goals with established strategies and changes in the external situation, the Board of Directors evaluates the Company's progress towards achieving ESG goals to ensure that they remain aligned with the global and the Company's overall development trend.

To thoroughly disclose the progress and achievements of Trinasolar's ESG and sustainable development progress in 2023, the Board of Directors considered and approved Trinasolar's 2023 Sustainability Report on April 24, 2023.

Our Sustainability Achievements

Total Revenue
113.39 billion RMB

Operational profit attributable to shareholders of the parent company
5.53 billion RMB

Earnings per share
2. 55 RMB/share

Weighted average rate of return on net assets
18.97%

R&D Investment
5.53 billion RMB

Share of R&D investment in revenue
4.88%

Total number of employees
43,031

Total training hours of employees
730,033 hours

Occupational health and safety investment
67.63 million RMB

The percentage of suppliers who have signed the Supplier Social Responsibility Commitment
95.67%

Total community contributions and charities investment
10.97 million RMB

The percentage of suppliers evaluated with supplier EHS and social responsibility audit
95.67%

Reduction of greenhouse gas (GHG) emissions intensity (CO_2e/MW) of cell from base year
42.74%

Reduction of integrated energy consumption intensity (tce/MW) of cell from base year
47.47%

Reduction of water consumption intensity (tonnes/MW) of cell from base year
85.48%

Reduction of greenhouse gas (GHG) emissions intensity (CO_2e/MW) of module from base year
61.47%

Reduction of integrated energy consumption intensity (tce/MW) of module from base year
38.32%

Reduction of water consumption intensity (tonnes/MW) of module from base year
44.40%

On-site renewable electricity generated
136,398 MWh
2.43 times that of 2022

Cumulative clean energy generation from solar power plants held in China
Exceeding **190** million kWh

- 2023 Forbes China Top 50 Innovative Enterprises
- 2023 Bloomberg Green ESG 50
- China's Top 30 ESG Excellence Practices of the Year
- Decarbonisation Leader by the European Union Chamber of Commerce in China
- 2023 Green Development Leader of the Year
- EcoVadis Bronze Medal
- National Green Supply Chain Management Enterprise
- National Supply Chain Innovation and Application Demonstration Enterprise

Stakeholder Communication

Trinasolar believes that the sustainable development of the Company cannot be achieved without the input and participation of stakeholders, and focuses on the demands and expectations of stakeholders. We continue to increase and improve the channels and frequency of communication with stakeholders, and engage in active and frank communication.

Communication Strategy

We regularly conduct survey to understand the opinions and suggestions of internal stakeholders such as employees and management, as well as the expectations and responses of external stakeholders such as government and regulatory agencies, shareholders and investors, customers, suppliers and partners, media, community and non-governmental organizations through various communication channels, and regularly summarize and provide feedback to the Company's management, and carry out targeted communication.

Stakeholders	Focused Sustainability Topics	Corporate Communication Channel
Customers	• Technology leadership • Environmental compliance • Water Management	• New product launches, technical exchanges • Industry exhibitions and seminars • Customer satisfaction surveys
Shareholders/ Investors	• Employee health, care and safety • Technology leadership • Human rights protection for workers	• Compliance disclosure • Phone, email and online investor communications • General shareholders' meeting • Investor Networking Sessions & Site Visits
Government and Regulatory Agencies	• Industry cooperation and development • Compliance operation	• Fulfillment of all obligations in accordance with the law • Regular reporting of company operations • Empowering social and corporate energy transformation • Promoting upstream and downstream synergistic development of the industry • Establishing internal control mechanisms for compliant operations • Paying taxes in accordance with the law
Employees	• Technology leadership • Industry cooperation and development • Compliance operation	• Employee communication sessions • Employee satisfaction survey • Public collection of employee opinions and feedback • Employee training programs • Delivering employee benefits
Suppliers and partners	• Technology leadership • Energy use and management • Water management • Product safety and quality	• Regular communication • Standardized management and implementation of contracts and agreements • Sustainable development of supply chain and fulfillment of corporate social responsibility
Community and non-governmental organizations (NGOs)	• Environmental compliance • Product safety and quality • Labor human rights guarantees • Occupational health, care and safety • Compliant operation	• Participation in social welfare • Carrying out low-carbon life science popularization
Media	• Ecological Impact • Product quality and safety	• Compliant disclosure of environmental and social performance data • Establishing communication and complaint channels such as official websites and social media

Materiality Assessment

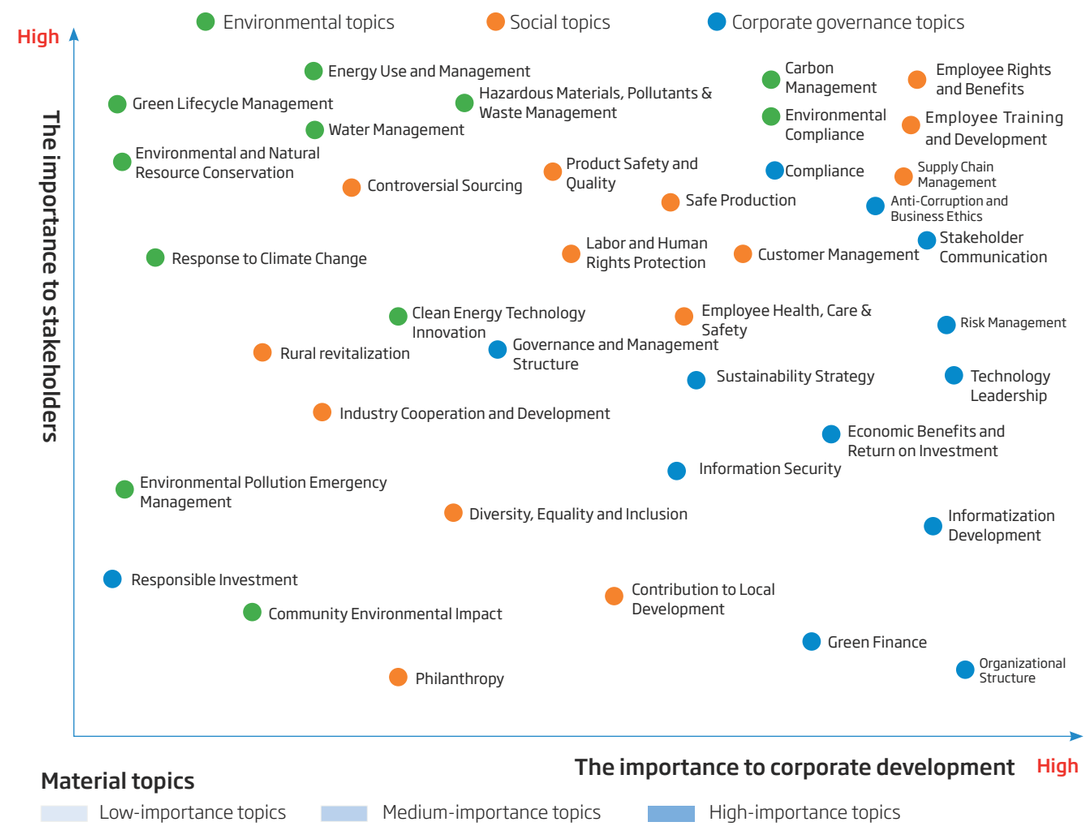
The results of materiality assessment are an important basis for Trinasolar's Sustainability Report, the development of long-term sustainability strategies and goals, and communication with key stakeholders. In 2023, Trinasolar incorporated the economic, environmental and human rights sustainability impacts of issues into stakeholder research and materiality assessment, as required by the GRI Standards 2021. Based on Trinasolar's vision, values and the characteristics of the industry in which we operate, the Company benchmarked domestic and international industry policies and standards, and ranked the importance of material issues by combining stakeholder communications, discussions among the Company's management and expert advice. The Company conducts stakeholder questionnaire surveys and in-depth communications once every two years.

During the Reporting Period, Trinasolar continuously tracked changes in the attention of key stakeholders to ESG issues and optimized the materiality pool in terms of the importance to Trinasolar's development and the importance to stakeholders, respectively. We conducted a large-scale stakeholder survey to collect responses from internal stakeholders (management and general employees) and external stakeholders (customers, investors, suppliers and partners, society and NGOs, and media). The Company consolidated the results of the stakeholder survey, as well as Trinasolar's management's insights from the industry's sustainability status and key issues identified, thus developing 2023 Materiality Matrix.

Trinasolar Materiality Assessment Process

Corporate Characterization	Analysis of Policies and Standards	Stakeholder Communicatoin	Management and Expert Judgment	Validation and Reporting
Identify ESG issues relevant to the Company through Trinasolar's vision, values, research and analysis of business, as well as peers benchmarking.	Identify ESG issues currently facing the Company through benchmarking and analysis of domestic and international policies and industry standards.	Communicate with Trinasolar's internal and external stakeholders, and collect stakeholder feedback in the form of questionnaires.	Based on the results of various analyses, analyze and judge the material issues and determine the order of importance of the material issues.	Determination of completeness of material issues by the Board of Directors; focused disclosure of high-importance issues in the Sustainability Report.

Trinasolar 2023 Materiality Matrix



In the 2023 Materiality Matrix, we have identified 38 material sustainability topics, of which 25 are highly important to Trinasolar and our stakeholders (i.e., the dark blue topics in the matrix above). All high-importance topics have been fully addressed in the Report with reference to the GRI standards and in the context of the Company's current situation.

The next stakeholder survey and materiality matrix will be conducted in 2024. Trinasolar will continue to collect and respond to feedback from stakeholders through multiple communication channels. Meanwhile, Trinasolar's ESG Management Committee will continue to promote and implement ESG commitments and objectives.

Innovation and Quality

Standing at the forefront of the PV industry, Trinasolar takes innovation leadership as core driving force for development of new quality productivity forces, and is committed to promoting innovation and driving PV technology vigorously forward with patents. At the same time, the Company adheres to internal quality management, actively engages in industry exchanges and cooperation, shares advanced experiences, and jointly explores solutions to sustainability challenges.

01

Published standards led or participated by the Company
126 Standards

Cumulative patents and software copyrights
1,582 pieces

IP Enlightment specialized trainings participants
More than **1,000**

Obtained a Declaration of Conformity for the **Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)** in the European Union issued by a qualified third-party organization

Received the **world's first offshore PV product certification** from TÜV Rheinland

TrinaStorage Product Testing Center was **awarded accreditation from CNAS**

Technological Innovation and Informatization Development

Technological Innovation

Innovation is the core driving force for the continuous development of the industry. As a global leader in the PV industry, Trinasolar always insists on being driven by technological research and development, and continuously provides value to customers with our strong R&D strength and technological experience.

Technology Leadership

Facing the technology development trend, Trinasolar adheres to the concept of "Mature one generation, reserve one generation", started to develop N-type technology as early as 2015, and promoted the industrialization of N-type TOPCon technology.

2015	Pioneered to propose the "i-TOPCon" double-sided cell structure and process flow of front-to-back contact, and realized the industrialization of this ultra-efficient cell technology
2019	Took the lead in the industry to create the i-TOPCon cell world record, selected in the United States NREL world solar cell record efficiency map and Professor Martin Green edited solar cell efficiency list
2021	TOPCon technology and 210mm cell technology are combined to form the 210 TOPCon
2023	In May, the new generation of N-type i-TOPCon technology was released, and the cell efficiency was rapidly improved. In August, the Vertex N-type 700W Modules were mass-produced with the efficiency of 22.5%
Early 2024	With the latest carrier enhanced sintering technology and edge passivation technology, the Vertex N-type Modules can reach a maximum power of 720.53W, an efficiency of 23.2%, and have been certified by a third-party organization

From promoting the industrialization of TOPCon technology from the laboratory, to the formation of 210+N solutions for all scenarios, and then to the advanced 210+N integrated industrial layout, Trinasolar achieves comprehensive leadership in technology, products and ecology.

Case | 210R Matrix Wafer Design Selected for 2023 Innovations

At the annual conference of China's PV industry in 2023, Trinasolar's "210R Rectangular Wafer Design and Unified Module Size for Medium-sized Modules" was selected as one of the "PV Industry Innovation Achievement Recommendation Catalog of 2023" given its technological originality and value in the industry. Introduced by Trinasolar in April 2022, the 210R matrix wafer broke the industry's mindset of square silicon wafers, and rectangular technology has gradually become an important path for cost reduction and efficiency increase in the PV industry.

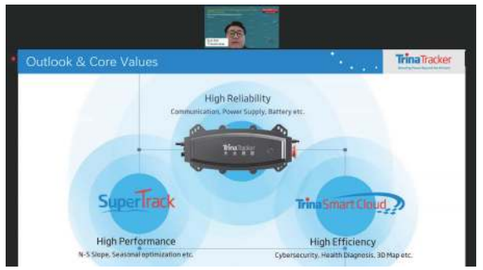
With the application of rectangular silicon wafers, 210R medium-format module has excellent size and electrical compatibility, and the container space utilization rate has reached 98.5%. It is up to the top grid design, which is currently the module size with the highest container space utilization rate, and can realize the maximization of customer value and system value. At the same time, the 210R module leads the standardization of the size in terms of the medium-version module, realizes the scale development, and promotes the maximization of the value of the application side.

Digital Solutions

Striving to create more value for customers, Trinasolar is devoting efforts to customer experience improvement, operations management and new business model development. Specific efforts include building intelligent, refined and data-driven management platforms for energy storage, Internet of Things and distribution grid users, providing them with digital solutions to reduce their energy management costs.

Case | TrinaTracker Collaborates with SolarPower Europe to Discuss the Digitalization of the PV Industry

Digital utilization holds significant promise for the PV industry, and the management and operation of PV systems are increasingly reliant on digitization. In November 2023, TrinaTracker collaborated with SolarPower Europe and PV Case to jointly hold an online seminar on "how to improve the efficiency and reliability of PV power plants through digitalization".

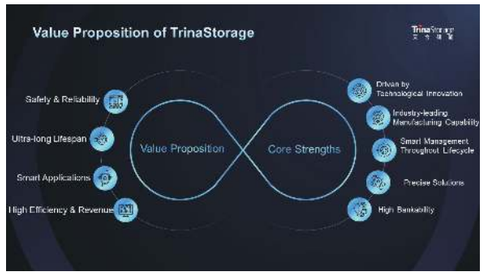


Head of the TrinaTracker's smart control system shares the digital tracking technology

The TrinaTracker smart control system contains controller, smart algorithm and cloud platform, which can offer multi-level protection, multiple communication methods, and multiple power supply modes to ensure reliable operation in extreme conditions. Trinasolar's Smart Cloud can help operators collect, store, and forward relevant data, diagnose fault alerts, and create 3D digital maps to ensure system security and stability. Super Track, a patented technology of TrinaTracker, has combined two core algorithms - Smart Tracking Algorithm (STA) and Smart Backtracking Algorithm (SBA). The former can help increase power generation on cloudy days, while the latter can minimize power generation losses due to row-to-row shading.

Case | Being Smarter - Trinasolar's Industrial and Commercial Energy Storage Solutions Create a Full-Scenario Smart Storage

As an industry-leading supplier of novel energy storage products and solutions, TrinaStorage responds to the market demand by launching a new generation of industrial and commercial energy storage solutions to provide smarter storage services for customers.



Value proposition of TrinaStorage

- ✓ Open up the whole life cycle of energy storage through the four-layer architecture to achieve an all-round upgrade of digital management and digital services;
- ✓ Provide one-stop software services and rely on Trinasolar's full-stack and self-developed smart manufacturing advantages to meet the operation needs of multi-terminal joint control, remote upgrade and automatic adjustment;
- ✓ Focus on full-scenario access, utilize AI technology to enhance smart storage, and facilitate innovations in distributed energy storage with augmented intelligence management

Module Recycling Study

In 2023, in the pre-study of retired module recycling technology, Trinasolar focuses on efficient dissociation of laminates, efficient separation and purification of precious metals in cells, etc., and has already disclosed four invention patents. In February 2024, Trinasolar, together with industry eco-partners, released the "China PV Collection and Recycling White Paper 2023". The white paper covers the latest progress of PV product recycling in 2023 in terms of policy, technology, market, industry, standards, patents, etc., and helps China's PV manufacturing whole chain governance and green development.

In the future, Trinasolar will continue to make breakthroughs and innovations to meet the rich and diverse needs of the market with products of higher power, higher efficiency and higher reliability, and return to our customers with optimal product design and maximum product value. We aim to facilitate the industry to reduce costs, increase efficiency and synergize the development of high quality, and at the same time, contributing to the energy transition in the global market with the power of Trinasolar.

Intellectual Property Protection

Trinasolar takes innovation leadership as the driving force of new quality productive force. We build a comprehensive and leading science and innovation system, with the number of effective invention patents ranking the leading position in China's PV industry. As of the end of the Reporting Period, the Company has obtained a total of 1,582 patents and software copyrights, of which 461 was added in 2023. At Trinasolar, we uphold the core value of "Persist in Open Innovation", give high priority to the protection of intellectual property rights, and further improve our world-class intellectual property protection system. We also maintain zero tolerance for infringement and crack down on any criminal acts of intellectual property infringement.

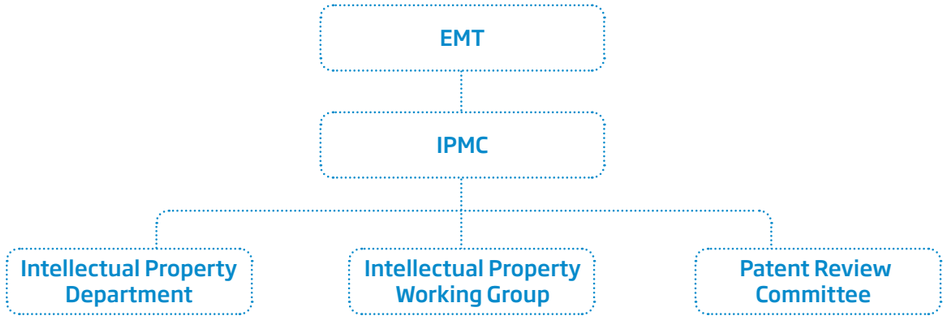
To safeguard the achievements of corporate innovation, the Company has formulated and implemented a series of policies related to intellectual property protection, such as the Patent Incentive Policy and the Patent Excavation and Application Process in accordance with the Patent Law of the People's Republic of China to maximize the protection of technological innovations.

Intellectual Property Management Structure

Trinasolar continues to improve the intellectual property management system. In 2023, we have set up the Intellectual Property Management Committee (IPMC) under the Executive Management Team (EMT). The IPMC is responsible for developing intellectual property strategies as well as relevant organizations, processes, and talent decisions.

For precise management of daily operations, the Company has set up three complementary organizations, i.e., the Intellectual Property Department, the Intellectual Property Working Group and the Patent Review Committee under the IPMC, to safeguard the world-leading position of Trinasolar's intellectual property management system.

Intellectual Property Department	Take responsibility for the execution and implementation of intellectual property daily work, and support internal trainings
Intellectual Property Working Group	A cross-business unit (BU) organization, which takes responsibility for intellectual property management of business end
Patent Review Committee	Take responsibility for patent application and maintenance, and support for quality improvement of intellectual property



Intellectual Property Management System

To maximize the application value of internal and external intellectual property rights, the Company has formulated corresponding management policies in the introduction, maintenance, use, disposal and other aspects of intellectual property rights. To safeguard the technological achievements of the Company in multiple dimensions, Trinasolar takes various risk management measures such as intellectual property risk early warning, discovery of intellectual property infringement clues, and intellectual property infringement litigation handling. To manage intellectual property more effectively, in 2023, the Company developed a digital intellectual property management system (Phase II), which includes patent application, risk screening and other aspects in digital system control. In doing so, the Company has improved the ability to respond to the intellectual property management needs.

To effectively control intellectual property risks across the supply chain, key parts and equipment suppliers are required to issue patent freedom-to-operate (FTO) reports to mitigate risks of patent infringement across the supply chain.

2023 Trinasolar Intellectual Property Key Performance

	Unit	Cumulative to the end of 2023	Additions in 2023
Patents and software copyrights obtained	piece	1,582	461
Trademark license	piece	771	45

Intellectual Property Protection Workshop

Activities such as patent incentives and training empowerment are organized to enhance the patent value awareness of all employees. We have incorporated the requirements for intellectual property protection into the Code of Business Conduct and Ethics for Employees, and organized activities such as Intellectual Property (IP) Week and IP Enlightment to empower employees.

Case | Patent-Centered Empowerment to Enhance Employees' IP Protection Awareness and Ability

In August 2023, the Company held the "IP Series Empowerment" covering all employees, with the aim to protect the Company's innovation and IP development. There were more than 1,000 participants, up by 100% compared with that of 2022.

To make employees apply what they have learned at work, the Company held the second "Trinasolar Cup" patent search competition, which attracted over 100 participants, indicating that the IP awareness and professional competence of the Company's employees have been greatly improved.

Experts of the Intellectual Property Department conducted courses on new patent searching

Informatization Development

In the ever-changing global environment, informatization development has been an industrial consensus. As an industry leader, Trinasolar is committed to fully realizing the integration of automation, informatization, intelligence and digitalization. We are carrying out full-stack intelligent manufacturing and are committed to ultimate production for digitalized Trina.

Case | Trinasolar's Yancheng Technology Production Base Selected as a Candidate for the "National Intelligent Manufacturing Excellent Scenes"

The National Intelligent Manufacturing Demonstration Factories and National Intelligent Manufacturing Excellent Scenes are major state-level projects jointly launched by the Ministry of Industry and Information Technology, the National Development and Reform Commission, the Ministry of Finance, and the State Administration for Market Regulation.

Trinasolar's Yancheng Technology production base promotes intelligent manufacturing

In 2023, Trina Solar Technology (Yancheng) Co., Ltd. (Yancheng Technology production base) comprehensively improved its automation, digitalization, and intelligence level with digital systems such as the manufacturing execution system (MES), quality management system (QMS), production traceability data system, and IOT-based radio frequency identification devices (RFID), as well as intelligent hardware such as the automated guided vehicle (AGV). In doing so, Yancheng Technology production base was selected as a candidate for the "National Intelligent Manufacturing Excellent Scenes".

Case | Qinghai Factory Built the Digital Operations Cockpit, Leading Automated Management

Trinasolar's Qinghai factory explores automated production modes. It connects production activities and automated equipment via the Internet of Things for production for the automated and centralized control of crystal pulling. This has improved both human efficiency and machine efficiency. At the same time, Qinghai factory has built a digital operations cockpit that uses 2D visual dashboards and 3D digital twin management, real-time monitoring and managing the operation of equipment, AGVs and coil bases. This has automated advanced production management.

Real-time monitoring with the 3D digital twin technology

Case | Trinasolar Included in the 6th "Dingge Awards" Digital Transformation Pioneer List with Quality Control Practices

The "Dingge Awards" Digital Transformation Pioneer List was launched by Harvard Business Review, SAP and Tsinghua University's Institute of Global Industry to recognize pioneering Chinese companies that excel in digital transformation. In 2023, Trinasolar's TrinaStorage BU New Base Intelligent Manufacturing MES Construction Project, an outstanding achievement in digital manufacturing, won the Production Transformation Model Award of the Year.

Trinasolar was included in the "Dingge Awards" Digital Transformation Pioneer List

Product and Service Responsibility

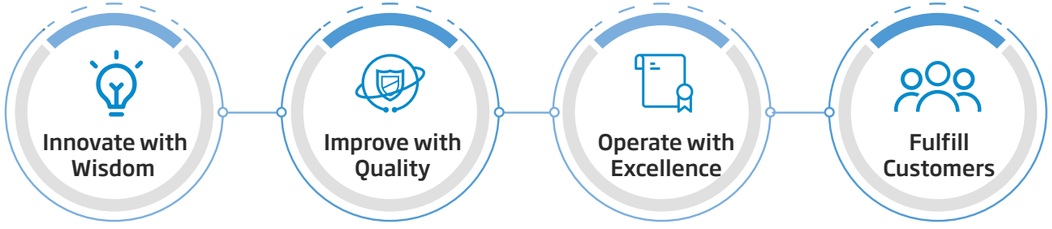
Product Quality Management

Quality Management System

Trinasolar always pursues excellence in quality and takes product quality as a strong support for the Company's sustainable development. The Company has established a quality management system covering the lifecycle of products. The system helps us in controlling quality from product design, suppliers, production process to project delivery and after-sales customer service, so as to ensure stable and high quality of all products.

The Company follows the Product Quality Law of the People's Republic of China, the Code of Practice for the Design, Construction and Acceptance of Photovoltaic Power Generation Projects as well as other laws, regulations and industry standards. On this basis, we have formulated and continuously updated our Product Stewardship Policy and the Quality Management Manual. In 2023, we updated our quality and operations management processes and structure. With new processes such as lifecycle quality risk management and quality review, we have been improving the quality system. As of the end of the Reporting Period, Trinasolar had obtained the ISO 9001 Quality Management System Certification and the REACH Compliance Declairation issued by a qualified third party.

Quality Policy



The Company regularly conducts internal audits for the quality management system. As guided by the ISO 9001: Quality Management System, IEC 62941:Terrestrial Photovoltaic (PV) Modules - Quality System for PV Module Manufacturing and Trinasolar's internal quality management systems and procedural documents at all levels, we oversee the quality management processes of all departments and production bases. In 2023, we conducted internal audits for the quality system at all production bases. As a result, 560 issues had been identified, mainly arising from production site management, document management, quality planning, and target management. We will continue to follow up and monitor the rectification of non-conformities to improve the company's quality system.

All product series of Trinasolar have been widely recognized by the public for their outstanding quality and application value. By the end of 2023, the Company had been awarded "Top Performer Module Manufacturer by PV Evolution Labs (PVEL) for 9 consecutive years, and Vertex-series modules recognized as "Overall Highest Achiever" by RETC in module manufacturing for 4th time; Trinasolar's N-type modules had passed the bankability assessment of UL Solutions; and TrinaStorage Elementa, a liquid-cooled energy storage system, had obtained the Bankability Report by DNV, an international authoritative certification body.

Case | Trinasolar Received the World's First Offshore Photovoltaic Product Certification from TÜV Rheinland

As a new application scenario, offshore PV faces harsh environmental challenges of "three highs and three strengthens", i.e., high temperature, high humidity, high salt mist, strong wind, strong waves and heavy precipitation, which place considerably higher demands on the reliability of photovoltaic modules. Thanks to their high reliability under extreme conditions and perfect adaptability to marine environments, the Vertex-series modules have been awarded the world's first offshore photovoltaic product certification by TÜV Rheinland. With this, Trinasolar has become the first and only photovoltaic company in the world to obtain the certificate.

Trinasolar received the world's first offshore photovoltaic product certification from TÜV Rheinland

Case | Trinasolar was Recognized as BNEF Tier 1 Photovoltaic Module Manufacturer Once Again

Bloomberg New Energy Finance (BNEF) is one of the most credible industry research institutions in the global new energy market, and its rating criteria for photovoltaic module manufacturers are quite strict. Therefore, its rating results are highly credible and often used in industrial production forecasts and corporate competitiveness analysis.

In the first quarter of 2024, Trinasolar once again secured a place on the list of BNEF Tier 1 photovoltaic module manufacturers, thanks to the strong bankability, reliable product quality and highly efficient 210+N products. The rating criteria for the Tier list this year are more stringent than before. To be specific, it requires that the candidate enterprises must have provided self-branded and self-produced modules for six different PV projects over the past two years, and these projects should be financed on a non-recourse basis by six different commercial banks.

Case | TrinaStorage's Product Testing Center Was Awarded Accreditation Certificate from CNAS

During the Reporting Period, TrinaStorage successfully passed the accreditation by the China National Accreditation Service for Conformity Assessment (CNAS) and was awarded the Laboratory Accreditation Certificate. The Certificate proves that the testing center of TrinaStorage has become a nationally and internationally accredited testing and calibration laboratory, and that test results within the scope of the testing center are internationally accepted.

CNAS Laboratory Accreditation Certificate of Product Testing Center of TrinaStorage

Product Recall

To effectively protect the rights and interests of customers, the Company has formulated and implemented the Product Recall Management Guide, which provides detailed operational guidelines on product recall timing, product recall evaluation, product recall examination and approval, product recall implementation, and product recall tracking and closure. In 2023, Trinasolar did not have any recalls of sold or shipped products for safety and health reasons.

Quality Culture

Trinasolar is committed to creating a participative quality culture that involves all employees to raise their attention to product quality. In addition to encouraging production bases to carry out cultural promotion activities, in 2023, the Company developed a process to manage the qualifications of personnel in charge of product quality. Moreover, the Company also built a matrix of quality functions and competence requirements, which requires different quality qualifications for employees in different positions. We offer a series of progressive courses for different levels and functional modules that cover such dimensions as quality functions, quality tools, and quality systems. Employees are required to take courses relevant to their own functions and are encouraged to explore in depth to continuously improve their awareness and competence concerning quality culture.

Case | Chuzhou Production Base, Vietnam Crystal Silicon and other Factories Strengthened Quality System Management and Enhanced Quality Awareness through "Quality Month" Activities

In 2023, Trinasolar carried out the annual "Quality Month" activities in several factories to strengthen the culture of quality supervision through quality training, quality knowledge contests, skill competitions and quality improvement projects.

"Quality Month" poster of Chuzhou Production Base

"Quality Month" at Vietnam Crystal Silicon

Supplier Quality Management

Supplier quality management forms an important part of an enterprise's quality management system. Trinasolar has established a supplier management system and formulated the Guidelines for Supplier Quality Management in Product Business. According to the system and the guidelines, the Company maintains quality control throughout the whole process of supplier selection, development, cooperation and retention to ensure suppliers' ability to continuously and stably provide qualified products and services that meet customers' needs.

We have set key performance indicators (KPIs) concerning supplier quality management. Such KPIs include the defective rate (DR) for each batch, the parts per million (PPM) of production lines, and the percentage of purchases from suppliers in the Approved Vendor List (AVL) of key materials. By doing so, we set clear standards for supplier quality management and encourage suppliers to improve their quality management systems to be more competitive in the market.

Since September 2023, the Company has optimized the management and control mode for incoming materials inspection and launched a digital Incoming Quality Assurance (IQA) system to standardize the management of the inspection standards and contents for incoming materials from suppliers. Since the system can directly output inspection results, the efficiency and accuracy of incoming material inspection have been greatly improved. Currently, the IQA system has been rolled out for use at all production bases.

While implementing quality control throughout the supply chain, Trinasolar will keep enhancing suppliers' competence and provide the utmost support for them. For suppliers who encounter technological bottlenecks, we will join hands with them to innovate and develop products that meet the needs of customers.

Case | Trinasolar Co-Innovate with Suppliers to Create Photovoltaic Aesthetics| Vertex Black Modules

To achieve the harmonious aesthetics between PV modules and roofs, Trinasolar, through close communication and joint innovation with suppliers, has produced pure black modules with no color difference. With their unique light transmittance and double-side power generation, these modules are perfectly matched with PV carports, corridors, and other outdoor distributed scenarios.

In 2023, Trinasolar's Vertex Black modules won the German Design Award.

Vertex Black modules widely used at home and abroad

In the future, Trinasolar will continue to improve the supplier quality management system. We will comprehensively assess the development stage of suppliers' systems through the supplier quality management maturity assessment, so as to explore the strengths and weaknesses in the construction and operation of the system. By doing so, Trinasolar strives to promote the continuous improvement of supplier quality management.

Responsible Marketing and Client Service

Adhering to the core value of "Focus on the Client", Trinasolar always put clients needs first and provides them with quality products. Meanwhile, Trinasolar has built a professional customer service team to empower customers with whole-process high-quality services.

Responsible Marketing

Trinasolar adheres to responsible marketing and has formulated and implemented internal policies such as the Management Procedures for Reviewing Sales Contracts of Module Business in strict accordance with the requirements of the Advertising Law of the People's Republic of China and other relevant laws and regulations. Besides this, Trinasolar also signs transparent and equal sales contracts with customers. We have strengthened marketing compliance management by strictly controlling the accuracy of disclosed promotional and marketing materials across channels and reviewing internal information labeling of products and services for legal compliance.

Customer Complaint Processing

To fulfill the responsibility to customers, Trinasolar has developed and implemented a number of complaint processing policies, including the Customer Feedback Management Procedures for Module Business, to continuously optimize customers' complaint processing experience with standardized and streamlined services. We have established a closed-loop complaint processing mechanism to provide customers with multi-option complaint processing solutions based on the content of customer complaints as well as the results of quality and inter-departmental internal communication. In case of product return, we promptly analyze the judgement according to the procedure and send the returned products back to the factory, laboratory, or local scrap according to the product risk level. For the convenience of customers to report problems, we have launched an online complaint service platform (CSP) for customers, and the "Voice of Customers" APP and the WeChat mini program to receive customer feedback at any time. All feedback will be responded to within 48 hours.

Satisfaction Survey

To continuously improve service quality and customer experience, Trinasolar has formulated the Trinasolar's Customer Satisfaction Survey Management Procedures. Besides, we conduct third-party customer satisfaction surveys and self-driven customer satisfaction surveys annually and invite global customers to evaluate their satisfaction with our products, markets, services and other aspects. Based on the results of the satisfaction surveys, we will identify potential problems and make improvements accordingly. In 2023,the Company collected a total of 386 customer questionnaires with overall customer satisfaction exceeding the industry average. The Company actively adopts feedback from customer satisfaction surveys, and continuously optimizes product features and service quality to meet and exceed customer expectations.

Client Privacy Protection

The Company attaches great importance to the security of client information and privacy protection, and strictly follows the principles of openness, legality, legitimacy, and necessity to collect personal information. We promise that we obtain authorization or consent from clients before collecting personal information. We collect personal information mainly through our website, official social media advertisements, online meetings, questionnaires, etc. Users may authorize the Company to use their personal information through such forms as the terms of the consumer's authorization or the consent to the collection and use of their personal information in the user agreement, separate privacy agreements.

We maintain strict confidentiality of clients' information when collecting and using their information to ensure that their privacy is not violated. During the Reporting Period, the Company did not have any complaints about infringement of client privacy or loss of client data.

Client Empowerment

Trinasolar strives to lead the way in smart solar energy and storage solutions and actively promotes ecological co-construction with domestic and overseas partners.

At the beginning of 2023, the Company took the lead in the industry to release a one-stop experience platform for distributors, "Trina Vertex Platform". For industrial and commercial partners in the Chinese market, this platform equipped them with the industry's top digital marketing technology and marked the official beginning of their ecological co-construction. We have empowered more than 12,000 throughout the year via our China Tours, live streaming, and industrial information sharing. With these activities, we help facilitate the photovoltaic and energy storage industry and contribute our efforts to the realization of a beautiful new zero-carbon world.

Trinahub launched in Europe

In June 2023, the Company launched Trinahub, a one-stop and all-encompassing Intelligent Experience Center, in response to the needs of overseas clients. With Trinahub, the Company provides overseas clients with training on Trinasolar's brands and popular products, as well as a variety of digital sales tools. By doing so, we have helped our partners thoroughly understand and promote the Company's products and services and contributed to the creation of a digital marketing ecosystem.

Industry Cooperation and Development

As a leading enterprise in the photovoltaic industry, Trinasolar has always been upholding the spirit of altruism and joining hands with upstream and downstream partners in the industry chain to build a new system of modern industry. Our purpose is to create a quality industrial cooperation ecosystem and realize mutually beneficial and win-win development.

Deepening Industry Collaboration

Trinasolar is deeply aware that the high-quality development of the PV industry is inseparable from the collaborative efforts of all enterprises in the industry. Through the collaboration among enterprises, we hope to better respond to the rapid innovation of photovoltaic technology and keep up with the rapid growth of the market. In 2023, Trinasolar participated in the upgrade of "700W+ Photovoltaic Open Innovation Ecological Alliance" and promote the establishment of the "China Energy Storage Industry Innovation Alliance".

Case | Trinasolar Participated in Photovoltaic Industry Ecological Innovation Conference to achieve "Four-Chain Integration"

In May 2023, the Photovoltaic Industry Ecological Innovation Conference was held in Changzhou. Themed with "create industrial ecology for common property", the conference aimed to jointly create a new ecosystem of integrated development of innovation chain, industry chain, capital chain, and talent chain.

During the conference, 18 upstream and downstream enterprises, including Trinasolar, signed a Cooperation Agreement for Photovoltaic Manufacturing Innovation Center. According to the agreement, these enterprises will give full play to their respective advantages in technology, products and services to jointly build a new ecosystem for the industry.

Gao Jifan, the Chairman of Trinasolar, delivered keynote speech at the Photovoltaic Industry Ecological Innovation Conference

Promoting Industry Innovation

Trinasolar insists on the philosophy of giving priority to R&D while staying current with market trends. By leveraging the solid foundation and theoretical research strengths of universities and research institutes, the Company has innovated a new cooperation model among industry, universities, and research institutes to keep promoting energy transformation and innovation.

Case | Trinasolar Collaborated with Fudan University to Reorganize and Build the State Key Laboratory of Photovoltaic Science and Technology

In 2023, based on the experience of preceding cooperation, Trinasolar once again collaborated with Fudan University to reorganize and build the State Key Laboratory of Photovoltaic Science and Technology, which was successfully approved by the Ministry of Science and Technology.

Gao Jifan, the Chairman of Trinasolar, was nominated as the President of the State Key Laboratory of Photovoltaic Science and Technology

Trinasolar maintains good academic exchanges with overseas photovoltaic experts and prestigious universities and consolidates and deepens the integration of industry, university and research by hiring a number of overseas experts and publishing high-level academic articles in collaboration with overseas universities.

Case | Academic Forum of the State Key Laboratory of Photovoltaic Science and Technology Was Held to Intensify National Strategic Science and Technology Strength in Photovoltaic Field

In January 2024, the academic forum of the State Key Laboratory of Photovoltaic Science and Technology was held in Changzhou. Setting sights on the global frontiers of PV science and technology, this academic forum was carried out around the three major research directions. At the conference, top experts in the industry shared the most advanced technologies in crystalline solar cells, perovskite solar cells and other topics and discussed the challenges and opportunities facing the industry.

Professor Ned Ekins-Daukes of the University of New South Wales lectured on III-V thin film solar cell technology

In addition, Trinasolar actively organizes technical core members to attend various international and domestic academic conferences to discuss technical problems in the industry, and exchange and share technical achievements to promote the technical development of the industry.

Case | International Photovoltaic Specialists Conference | i-TOPCon Technology and "Golden Size" Modules Received International Attention

In June 2023, the 50th International Photovoltaic Specialists Conference was held in the U.S. Dr. Yifeng Chen, the Associate Vice President of technology in Trinasolar and Vice President of the State Key Laboratory of Photovoltaic Science and Technology, was invited to attend the conference. At the conference, he was formally presented with the 2023 IEEE Stuart R. Wenham Young Professional Award, one of the highest honors bestowed on young researchers in the field of photovoltaics around the world. Dr. Yifeng Chen and his team's achievements in the research of high-efficiency crystalline silicon solar cells and modules were widely recognized by international specialists.

Dr. Yifeng Chen shared the advanced technologies and products of Trinasolar

At the conference, Dr. Yifeng Chen shared the mass production technology of Trinasolar's leading N-type i-TOPCon and "golden size" modules that center on customer value with photovoltaic experts from all over the world. He also demonstrated the application of the "golden size" modules with examples of industrial/commercial distributed and ground-mounted power stations in complex terrains.

Participating in Standard Setting

Trinasolar actively promotes the standardization and normalization of the industry and provides technical and practical support for industry development by participating in the development and revision of standards of PV products, technologies and other fields. **By the end of 2023, we have led and participated in the development of 181 standards, including 126 published standards and 1 international standard.**

Case | Trinasolar Led the Industry's First Standard (Draft for Comments) of Intelligent Tracking Technology Standard to Be Released

In August 2023, the industry's first standard for intelligent tracking technology - Testing Methods for the Intelligent Tracking Performance of Photovoltaic Trackers - was officially released for public advice. The Draft was initiated by the China Photovoltaic Industry Association (CPIA), led by Trinasolar, and co-edited by 15 organizations and enterprises.

Responding to the phenomenon of various intelligent tracking technologies at home and abroad, different effects of power generation, and lack of industry-uniform testing methods, the Draft regulates the testing methods for the intelligent tracking performance of photovoltaic trackers. The regulated aspects include the principle of approaches, the requirements for testing conditions and devices, the definition of functions, the testing methods, and the analysis of test results. With the above standards, the Draft lays down an important foundation for leading and driving the standardization of intelligent tracking technologies in the PV industry.

Climate and Environment

Trinasolar has made green and low-carbon development a top priority and is committed to climate change actions to help achieve a net-zero transition of the planet. Fully aware of the importance of living in harmony with nature, we continue to increase the use of electricity generated from renewable energy, reduce the use of non-renewable resources such as fresh water, and integrate biodiversity protection into our business philosophy and practices.

02

Trina Solar (Suqian) Technology Co., Ltd. was honored as **the National Green Factory**.

GHG emissions intensity of cell
27.66 tCO_2e/MW
decreased by 42.74% from the 2020 baseline

GHG emissions intensity of module
9.30 tCO_2e/MW
decreased by 61.47% from the 2020 baseline

Integrated energy consumption intensity of cell
6.37 tce/MW
decreased by 47.47% from the 2020 baseline

Integrated energy consumption intensity of module
2.07 tce/MW
decreased by 38.32% from the 2020 baseline

On-site renewable electricity generated
136,398 MWh
2.43 times that of 2022

Water consumption intensity of cell
149.94 tonnes/MW
decreased by 85.48% from the 2020 baseline

Water consumption intensity of module
47.14 tonnes/MW
decreased by 44.40% from the 2020 baseline

Environmental Compliance

Trinasolar leads the development with a green approach and attaches great importance to the environmental impact of our production and operation processes. We strictly require our subsidiaries and production bases to strictly implement the Environmental Protection Law of the People's Republic of China and the relevant environmental regulations and requirements of the countries where we operate overseas, so that we can ensure high-quality products while taking into account the high standard of environmental protection requirements.

Environment Compliance

Energy Management

Trinasolar has always been committed to the low-carbon operations of green factories. We have issued and implemented internal rules and regulations, including the Energy & Resource Management Procedure, the Energy Measurement and Management Procedure, and the Energy Review Procedure. As of the end of the Reporting Period, Trinasolar, Changzhou Technology, Yancheng Guoneng, Suqian Technology, Yiwu Technology, Suqian Optoelectronics, Yancheng Dafeng, and Yancheng Technology factory had all obtained the ISO 50001 Energy Management System Certification.

Water Management

We strictly comply with local laws and regulations on water access, use, and wastewater pollutants in the locations where we operate, such as the Water Law of the People's Republic of China, the Water Pollution Prevention and Control Law of the People's Republic of China, the Guidelines for Water Efficiency in Key Industries, the Discharge Standard of Water Pollution for Electronic Industry, the Law on Water Resources of the Socialist Republic of Vietnam, and the Law on Water Resources of Thailand. In 2023, we completed regular reviews and updates of our internal rules such as the Prevention and Control Management Procedure of Water Pollution and the Standard for Uniform EHS Performance Data Reporting. No violations against water-related laws and regulations occurred throughout the year.

Wastewater Discharge

We strictly follow the Law of the People's Republic of China on Environmental Impact Assessment, the Law of the People's Republic of China on Prevention and Control of Water Pollution, the Integrated Wastewater Discharge Standard, the Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant, the Emission Standard of Pollutants for Battery Industry, the Wastewater Quality Standards for Discharge to Municipal Sewers, the Regulations on Permit Management for Discharging Urban Sewage into Drainage Network, the Regulations on Prevention and Control of Water Pollution of Lake Taihu in Jiangsu Province and the Regulations on Prevention and Control of Sewage Pollution in Jiangsu Province and other localized laws and regulations.

Exhaust Gas Emission

The Company has been making efforts in the management of exhaust gas emissions. In line with the Law of the People's Republic of China on Prevention and Control of Atmospheric Pollution and other relevant laws and regulations at places where we operate, we have established and implemented internal policies such as the Prevention and Control Management Procedure of Air Pollution to make sure that the exhaust gas emissions after treatment meet standards.

Waste Management

The Company strictly complies with the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, the Standard for Pollution Control on the Hazardous Waste Landfill and other relevant laws and regulations in force at places where the Company operates. Moreover, the Company has issued and implemented the Waste Management Procedure. All Trinasolar employees and contractors are required to comply with the procedure to ensure standardized handling of wastes in production and operations.

Emergency Management

The Company is actively improving the environmental emergency management system. We have established and implemented the Emergency Response Plan(ERP) since 2008. And we updated the 24-hour emergency contact information for our emergency command and management teams and production bases during the Reporting Period.

Green Lifecycle Management

Trinasolar has always attached great importance to carbon emission control in all aspects throughout its PV products' lifecycle. We systematically consider the impact on resources and the environment in the selection, production, distribution, use, recycling, and disposal of raw materials, and strive to use as many harmless raw materials as possible to achieve a green and low-carbon development.

In addition, Trinasolar is committed to product sustainability by reducing product replacement and increasing product recycling. As a PV Cycle member since 2010, Trinasolar has developed a complete set of compliant treatment methods for end-of-life PV modules to minimize environmental pollution. In 2023, we issued the Product Stewardship Policy signed by the Chairman. The policy specifies our commitment to fulfilling environmental, health, safety and corporate social responsibilities at every stage of the product lifecycle and to voluntarily participating in the product recycling program to recover and reuse defective and end-of-life solar modules.

In December 2020, Trinasolar received the first UL Certification and mutual recognition mark from EPD Italy in the PV industry worldwide. In December 2023, our Vertex N 700W, Vertex N 610W and Vertex 670W modules were granted the UL Environmental Product Declaration (EPD) Certification and achieved mutual recognition with EPD Italy. Our Vertex N 700W modules lead the industry in GHG impact with a figure as low as 13.2g CO_2 e/kWh. With such green and low-carbon PV products for customers, we take an active part in fulfilling our commitment to sustainable development.

Ecological Protection

Trinasolar practices green development and attaches great importance to the protection of the ecological environment and biodiversity in the locations where the Company operates. We also take this factor into account when selecting sites for our production bases, expanding our businesses and making investment decisions. This helps us in achieving a balance between economic and environmental benefits. In 2023, Trinasolar was awarded the "Leading Enterprise in Green Development of Jiangsu Province in 2023", and several bases were honored as "Green Factory".

Trinasolar's "Green Factory" Honors as of the end of 2023

Company	Honor
Trina Solar Co., Ltd.	National Green Factory
Trina Solar (Suqian) Technology Co., Ltd.	National Green Factory
Trina Solar (Yancheng Dafeng) Co., Ltd.	Provincial Green Factory
Yancheng Trina Solar Guoneng Science & Technology Co., Ltd.	Provincial Green Factory
Trina Solar (Suqian) Optoelectronics Co., Ltd.	Provincial Green Factory
Trina Solar Yiwu Technology Co., Ltd.	Municipal Green Factory

At the early stage of site selection, we conduct the environmental impact assessment and take local water resources into consideration. During the Reporting Period, our newly built production bases of Qinghai Technology, Qinghai Crystal Sillicon, and Suqian Optoelectronics obtained environmental impact assessment reports issued by third-party institutions. In addition, in the development and construction process of power stations, Trinasolar strictly abides by relevant environmental laws and regulations, promotes the integration of nature and power station projects, and continuously improves the construction plan to adapt to and improve the local ecosystem.

Climate and Carbon Emission Management

Responding to climate change is an important focus of Trinasolar's efforts to develop new quality productivity and sustainable operations. In 2020, China announced a "dual-carbon goal" of carbon peaking and carbon neutrality. As a leader in the renewable energy industry, Trinasolar attaches great importance to climate issues and insists on contributing to the global net-zero transition through climate action, while at the same time continuing to reduce the emissions from operations and value chain, in order to make every effort to address climate change.

Climate Governance

Trinasolar regards addressing climate change as an important strategy for the Company's sustainable development, with the Board of Directors as the core responsible organization, while the ESG Management Committee assumes the decision-making and supervisory functions for climate-related matters, and each relevant department also assumes specific responsibilities. In 2023, Trinasolar updated and published the **Environmental, Occupational Health and Safety, and Energy Management Policy** issued by the Chairman of the Board of Directors, as well as updating and publishing the **2024 Reconfirmation of the Product Stewardship Policy** in January 2024, in which it is clear that Trinasolar is practicing the Global Carbon Reduction Initiative, and is committed to continuously improving the efficiency of energy utilization, reducing GHG emissions, and actively participating in the fight against climate change.

To coordinate low-carbon development efforts, Trinasolar has set up a carbon management mechanism and established a three-tier (i.e., decision-making, management and execution) carbon management structure, consisting of the Board of Directors, the Carbon Management Committee and the Carbon Management Working Group. On this basis, Trinasolar has incorporated the core operational management, functional departments and businesses into the carbon management system, giving full play to the advantages of carbon management, and making concerted efforts from top-down and bottom-up to realize low-carbon development in a comprehensive, systematic and effective manner.

Climate Strategy

Mission & Vision	**Mission:** Solar energy for all **Vision:** Be a global leader in PV smart energy and storage solutions, facilitate the transition of new power systems, and create a beautiful zero-carbon new world					
Climate Ambition Goal	**Climate Ambition Goal:** Strive to achieve carbon neutrality at global organization level in 2030. Participate in Global Carbon Reduction Initiatives. Push for China Double-carbon Targets and Paris Agreement Climate Ambitions. Strive to achieve net-zero emissions by 2050.					
2025-2030 Interim Targets	Carbon Intensity Targets	Renewable Energy Use, Energy Saving and Consumption Reduction	PV Power Plant Development and Rooftop PV Power Station	Zero-Carbon Industrial Part and Zero-Carbon Factory	Green Value Chain	Product Carbon Footprint
	Based on 2020, strive to achieve following targets in 2025: 1. 50%reduction in GHG emissions (scope 1 and 2) intensity(tCO2e/MW). 2. 40% reduction in integrated energy consumption intensity (tce/MW). 3. 20% reduction in water consumption intensity (t/MW).	1. Strive to achieve 100% renewable energy at the organization level in 2030. 2. From 2021 to 2030, strive to achieve a cumulative saving of 1 billion kWh electricity in global operations. 3. Waste reduce, reuse & recycle (3Rs), strive to achieve "zero" landfill waste by 2030.	1. Strive to develop at least one "Source-Grid-Load-Storage" PV demo project equipped with smart energy system by 2025. 2. Install PV system on the rooftop of factory buildings for all manufacturing bases.	1. Promote the construction of zero-carbon industrial park and the whole PV production chain in Qinghai. 2. Promote the construction and certification of zero carbon factories.	1. Establish a green value chain system and promote zero-carbon transformation of value. By 2025, advocate and promote the participation of 80% of major carbon-emission suppliers in a zero carbon transition, and establish and improve the GHG inventory system of the value chain and the carbon footprint certification system for products.	Continuously carry out product carbon footprint and EPD certification to explore the potential of carbon reduction: 1. 210/210R series module products. 2. Intermediate products (cells, wafers, silicon). 3. Bracket products, energy storage cores, energy storage system products.
Steps and Actions	Zero-Carbon Operation				Zero-Carbon Value Chain	Zero-Carbon Products
	Energy saving, carbon reduction and improve energy efficiency Energy storage technology and interaction of load and storage between source and network Energy Management System, Energy and Carbon Information Management System Renewable energy utilization, Hydrogen energy development and utilization				Promoting a Green Value Chain System, Value chain zero-carbon transition	Products' carbon footprint certification, Product's EPD certification
	Capacity bulding for professionals in zero-carbon business positions, zero-carbon marketization advocacy, and paricipation in national and global climategovernance actions and initiatives					

In 2023, Trinasolar has established a "Zero-Carbon System" covering the dimensions of "Zero-Carbon Operation, Zero-Carbon Value Chain, and Zero-Carbon Products", and clearly defined the climate ambition of striving to achieve carbon neutrality at the global organizational and operational levels by 2030, and systematically set up interim climate targets for 2025-2030.

Zero-Carbon Operation	The Company has established targets for carbon intensity, renewable energy use, energy conservation, PV power plant development and rooftop PV power plant , which together support the achievement of carbon neutrality targets at the operational level.
Zero-Carbon Value Chain	The Company actively promotes the green value chain system and zero-carbon transition of the value chain, and is committed to establishing and improving the GHG inventory system of the value chain and the product carbon footprint certification system.
Zero-Carbon Products	The Company will continue to carry out product carbon footprint accounting and certification to explore the potential for carbon reduction.

Our climate strategy includes integrating climate risks and opportunities into our risk management system and processes to effectively identify and address climate risks. We continue to focus on the potential impacts of climate change on our own business and upstream and downstream of our industry chain, and we work with our suppliers and partners to enhance the climate resilience of our supply chain.

Climate Risk Management

In terms of risk management, Trinasolar identifies potential climate risks and opportunities in the operation and production activities with reference to TCFD's risk analysis framework, and will continue to invest in integrating them into the overall operational risk management. Through policy research, industry benchmarking, and expert advice study, the Company has identified the following climate change-related risks and opportunities associated with Trinasolar's business development and operations, having assessed the impact of each risk and opportunity on the Company's financial performance. In 2023, we conducted the annual identification and determination of climate risks and opportunities. The results are as follows:

Trinasolar Climate Risks and Opportunities Matrix

Risk Type	Risk Factor	Potential Financial Impact	Response
Entity Risks	Climatic disasters (e.g., typhoons, floods resulting in safety accidents or forced suspension of production)	• Transportation difficulties and supply chain disruptions affect normal production, resulting in lower revenues • Loss of company property • Increased operating costs (e.g., increased water and power supply costs) • Lower sales and higher insurance expenses	• Establishment of an emergency plan and annual emergency drills • Site selection for new plants takes local climate and future climate change impacts into account.
	Climate change (e.g., abnormal power supply due to persistent high temperatures, increase in high temperature expenses, unstable supply capacity and transportation; relocation or restructuring of production plants in coastal areas due to sea level rise, etc.)	• Transportation difficulties and supply chain disruptions affect production, resulting in lower revenues • Reduced operational efficiency and increased costs (e.g., employee productivity and EHS incidents)	• Optimize the mode of product transportation and increase the ratio of local procurement • Raise awareness of climate change and improve energy efficiency in plant location and daily operations

Risk Type	Risk Factor	Potential Financial Impact	Response
Transition Risks	Policy and legal risks (e.g. with the advancement of China's "dual-carbon" target and the continuous introduction of relevant policies, regulations and industry standards, if the Company fails to adjust the business strategy in a timely manner, it will lead to an increase in the cost of performance in the carbon market; the obligation of carbon disclosure will be strengthened; and the domestic and overseas carbon emission requirements and regulations for the Company's photovoltaic products and services will continue to be perfected)	• Increased operating costs (e.g., increased compliance costs, increased insurance costs) • Write-offs, asset impairments, early retirement of existing assets due to policy changes	• Annual tracking of relevant laws and regulations and annual statistics on GHG emissions to effectively respond to policy changes
	Technology risk (e.g., technology risk upgrades due to customer requirements for companies to be low-carbon, including increased operating costs associated with investing in low-carbon equipment and technology)	• Write-off and early retirement of existing assets • Increased R&D investment in new low-carbon technologies • Higher low-carbon operating costs	• Adopting the departmental responsibility system to enhance the efficiency of equipment utilization and improve product production efficiency • Establishment of an internationally recognized energy management system and elimination of energy-intensive equipment
	Reputational risk (e.g., as capital markets, customers and other stakeholders become increasingly concerned about corporate climate action, poor corporate environmental and climate performance may in turn affect the company's reputation and performance)	• Decline in customer demand for goods/services, resulting in lower revenues; • Reduced revenue due to reduced production capacity (e.g., delayed planning approvals, supply chain disruptions)	• Communicating with stakeholders on climate change as an important issue through channels such as sustainability reports, stakeholder surveys, and official account disclosure
	Market risk (e.g., as low-carbon awareness grows, customer behavior will change accordingly. The company faces market risk from changes in consumer behavior in the market: increase in the cost of raw and auxiliary materials; decrease in customer demand for high carbon products and services)	• Shifts in consumer preferences and reduced demand for goods and services • Increase in production costs • Decrease in company revenues	
Transition Opportunities	Technology opportunities (early deployment of clean technologies and use of clean energy to effectively address the risk of future energy price increases)	• Reduced operating costs (e.g., through efficiency gains and cost reductions)	• Increase the proportion of green electricity usage through self-generated solar energy and purchase of green electricity • Establish a green value chain system, promote zero-carbon value transformation, and drive the upstream and downstream value chains to participate in carbon emission reduction actions
	Market preference opportunities (to meet the needs of the capital market, customers and stakeholders for clean energy-related products and services through R&D and innovation, to enhance the company's competitive position in the market, and to increase operating income)	• Increased demand for products and services leading to growth in the company's operation costs and profits • Increased investment in renewable energy	• Actively promote the innovation incentive mechanism and increase investment in R&D to provide customers with cleaner, more low-carbon and more efficient products and services • Improve market competitiveness and PV products with a low or even zero carbon footprint are more likely to dominate the market and be recognized by the market and customers

Carbon Emissions Management

Trinasolar developed the GHG Data and Quality Management Procedures in 2011 and has been implementing it since then. We also actively promote carbon inventory and accounting and carbon footprint tracking. In 2023, we updated the GHG Data and Quality Management Procedures by improving the selection and review of quantitative methods, the calculation and selection table of indirect GHG emission factors, etc., so as to align our GHG emissions inventory and accounting with international practices and trends. All of the Company's PV manufacturing factories in China and overseas have conducted GHG emission inventory in accordance with ISO 14064 and obtained third-party data verification report. Meanwhile, on the basis of accurate accounting of GHG emissions at our own organization level, we have set GHG emissions targets in conjunction with the Company's operations to help achieve the targets of the Paris Agreement.

Trinasolar GHG Emissions Intensity Reduction Targets

Based on 2020, **50%** reduction in GHG emissions intensity (tCO_2e/MW) of cell in category 1 and category 2 by 2025

Based on 2020, **50%** reduction in GHG emissions intensity (tCO_2e/MW) of module in category 1 and category 2 by 2025

Note: The above target achievement does not include emission reductions from solar power plants developed and held by Trinasolar.

In 2023

Trinasolar's GHG emissions intensity of cell was reduced to

27.66 tCO_2e/MW

decreased by 42.74% from the 2020 baseline

GHG emissions intensity of module

9.30 tCO_2e/MW

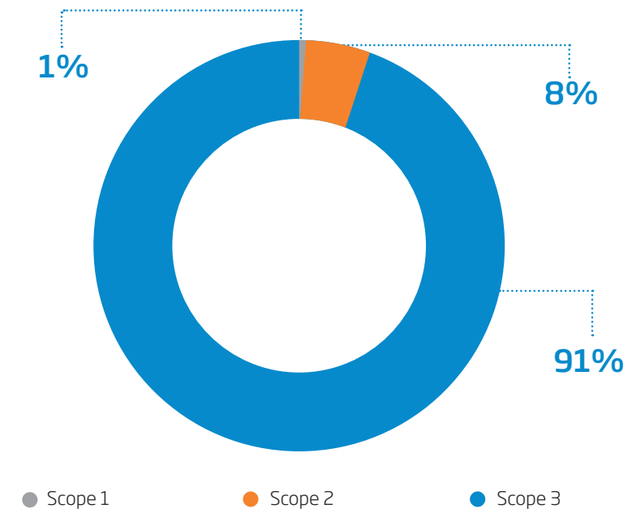
decreased by 61.47% from the 2020 baseline

The GHG emissions intensity of module (tCO_2e/MW) has reached or even exceeded the established target ahead of schedule.

2020-2023 Trinasolar GHG Emissions Key Performance

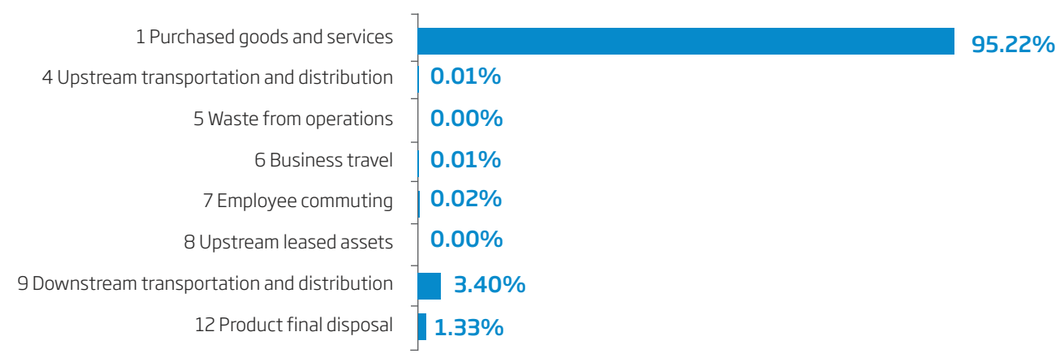
Disclosed Item	2023[1]	2022	2021	2020
Operational Scope Emissions- Location-based (10,000 tons of CO_2e)	213.50	118.79	87.96	58.37
Operational Scope Emissions - Market-based (10,000 tons of CO_2e)	209.74	-	-	-
Of which Scope 1 Emissions(10,000 tons of CO_2e)	10.77	1.93	2.94	1.37
Of which Scope 2 Emissions - Location-based (10,000 tons of CO_2e)	202.73	116.86	85.02	57.00
Of which Scope 2 Emissions - Market-based[2] (10,000 tons of CO_2e)	198.97	-	-	-
GHG Emissions Intensity of Cell (tCO_2e/MW)	27.66	23.76	30.19	48.31
GHG Emissions Intensity of Module (tCO_2e/MW)	9.30	9.20	12.22	24.14
Scope 3 Emissions (10,000 tons of CO_2e)	2,143.84	1,594.79	-	-
Value Chain Emissions - Location based (10,000 tons of CO_2e)	2,357.34	1,713.58	-	-
Value Chain Emissions - Market based (10,000 tons of CO_2e)	2,353.58	-	-	-

Breakdown of 2023 Trinasolar GHG Emissions[4]



The Company conducted an analysis of Scope 3 emissions, in which Category 1 Purchased Goods and Services was the largest source of Trinasolar's Scope 3 emissions, accounting for approximately 95.22%, with emissions in this category mainly coming from production raw materials such as silicon. This was followed by Category 9 Downstream Transportation and Distribution, and Category 12 Final Product Disposal. The total contribution of these three categories to Scope 3 emissions was more than 99%.

Breakdown of Different Categories of 2023 Trinasolar Scope 3 Emissions



[1]A third-party organization with carbon verification qualification conducted a third-party verification of Trinasolar's 2023 Scope 1, Scope 2 and value chain GHG emissions data in accordance with ISO 14064-1:2018. The scope of the verification includes Trinasolar (modules and brackets factory), Changzhou Technology, Yancheng Guoneng, Suqian Technology, Yiwu Technology, Suqian Optoelectronics, Yancheng Dafeng, Yancheng Technology, Thailand factory, Vietnam Taiyuan factory, Huaian Technology, Huaian Optoelectronics, Zhunger Banner Module, Yancheng New Energy, Qinghai Technology, Qinghai Optoelectronics, Qinghai Wafer, Qinghai Crystal Silicon, Suqian Wafer, Chuzhou Storage, Trina Storage, Vietnam Crystal Silicon and Viana factory.

[2]Trinasolar discloses Scope 2 GHG emissions (market-based) data from 2023 Sustainability Report.

[3]Value chain emissions include Scope 1, 2 and 3 GHG emissions.

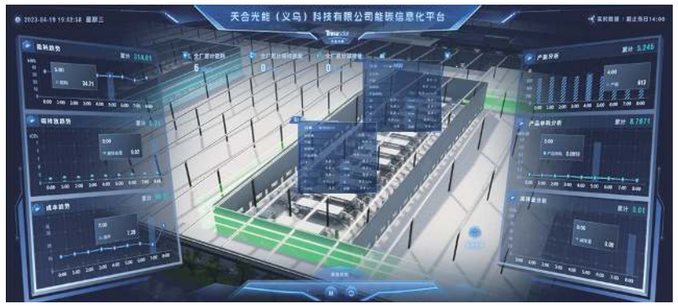
[4]The data of Scope 2 emissions in this detailed chart is the amount of Scope 2 GHG emissions (market-based).

Case | Trinasolar Received the First Zero-Carbon Factory Certificate in the PV Industry from an Authoritative Agency

In April 2023, Yiwu Technology was granted the Zero-Carbon Factory (Type 1) Certificate for 2022 by Ti Testing and Certification Group, becoming the first Zero-Carbon Factory certified by an authoritative agency in the PV industry. The certificate is recognized by China Energy Conservation Association and can be found on the website of the National Certification and Accreditation Administration.

As a pilot zero-carbon factory, Trinasolar's Yiwu Technology Factory has laid out a green zero-carbon supply chain in all aspects, from product design, carbon footprint management, energy management, equipment modification, process upgrades to digital intelligent management system optimization. Based on scientific and systematic management, the Yiwu Technology's carbon emissions intensity (tCO_2e/MW) in 2023 dropped by 4% compared with 2022.

Zero Carbon Factory (Type 1) Certificate of Yiwu Technology



Example of smart carbon management platform of Yiwu Technology

Case | Trinasolar Recognized as a "Decarbonisation Leader" by the European Union Chamber of Commerce in China

In September 2023, the European Union Chamber of Commerce in China held the 2023 Sustainable Business Awards Conference & Ceremony: Embracing the Critical Transition & Measuring Unexpected Impacts. Trinasolar won the "Decarbonisation Leader" award for the efforts and achievements in leading low-carbon transformation and addressing climate change.

The "Decarbonisation Leader" trophy and certificate from the European Union Chamber of Commerce in China

Energy Use and Management

Energy Management

Trinasolar Energy Management Goals

- Integrated energy consumption intensity of cell (tce/MW) decreased by **40%** by 2025 from the base year 2020
- Integrated energy consumption intensity of module (tce/MW) decreased by **40%** by 2025 from the base year 2020
- Actively promoting and using renewable energy and striving to achieve **100%** renewable energy in global production operations by 2030
- Conducting energy conservation projects to achieve cumulative savings of **1 billion** kWh in electricity consumption in global production operations from 2021 to 2030

With regard to Trinasolar's energy management goals mentioned above, in particular, in 2023, we fully assessed the Company's energy-saving and consumption-reducing capabilities and potential on the basis of the original goal of "saving 100 million kWh of electricity". Accordingly, we have set a more ambitious goal, that is, to save a cumulative total of 1 billion kWh of electricity in global manufacturing and operations from 2021 to 2030.

Due to the Company's new production bases being put into production in 2023, Trinasolar's integrated energy consumption intensity of cell and module increased slightly compared to 2022. However, it is still significantly better than the level of the base year. **In 2023, the integrated energy consumption intensity of cell (6.37 tce/MW) decreased by 47.47% from the 2020 baseline. The integrated energy consumption intensity of module (2.07 tce/MW) saw a decrease of 38.32% from the 2020 baseline**.

2020-2023 Trinasolar Energy Consumption Key Performance[5]

	2023	2022	2021	2020
Integrated Energy Consumption [6] (tce)	515,868	264,804	176,233	148,086
Natural Gas (10,000 m^3)	289	89	69	53
Electricity (MWh)	4,141,524[7]	2,026,872	1,433,209	1,007,825
Of which: Municipal Electricity Purchased (MWh)	3,348,871	2,026,872	1,433,209	1,007,825
Of which: On-site PV Self-generated (MWh) [8]	136,398	-	-	-
Of which: Off-site Renewable Electricity Purchased (MWh)	656,255	-	-	-
Integrated Energy Consumption Intensity of Cell (tce/MW)	6.37	5.55	8.18	12.13
Integrated Energy Consumption Intensity of Module (tce/MW)	2.07	1.96	2.46	3.36

Energy Conservation and Utilization of Renewable Energy

During the Reporting Period

Trinasolar launched **27** energy conservation programs

had saved a total of **67.72** million kWh[9]

Since 2021, the Company has saved electricity a total of **112.68** million kWh

[5] In 2023, Trinasolar's environmental data includes Trinasolar, Changzhou Technology, Yancheng Guoneng, Suqian Technology, Yiwu Technology, Suqian Optoelectronics, Yancheng Dafeng, Yancheng Technology, Thailand factory, Vietnam Taiyuan factory, Huaian Technology, Huaian Optoelectronics, Zhunger Banner Module, Yancheng New Energy, Qinghai Technology, Qinghai Optoelectronics, Qinghai Wafer, Qinghai Crystal Silicon, Suqian Wafer, Chuzhou Storage, Trina Storage, Vietnam Crystal Silicon and Viana factory.

[6] Trinasolar's integrated energy consumption data includes water, electricity and natural gas.

[7] Trinasolar's electricity consumption was significantly higher than in previous years due to the continued commissioning of the Company's new capacity in 2023.

[8] Trinasolar discloses data on on-site renewable electricity generated and off-site renewable electricity purchased metrics from the 2023 Sustainability Report.

[9] Excluding the electricity saved by Trinasolar through rooftop PV power generation in 2023.

2023 Trinasolar Key Efforts on Production Energy Use and Corresponding Impact

Ingot and Wafer	• Monocrystalline furnace to improve the efficiency of the power unit of the hydraulic system and reduce energy consumption; • Installation of rooftop photovoltaics on the workshop roof for grid-connected power generation	• Estimated savings of **230.4** liters of hydraulic oil and electricity savings of **7.2 million** kWh for the year
Cell	• Underclocking improvements; • Central air conditioning system full link energy saving control improvements; • Adjustment of fan frequency	• Estimated electricity savings of **17.45 million** kWh for the year
Module	• Turning off non-working area lighting and replacing high-efficiency low-power energy-saving lamps in workshops; • Construction of rooftop photovoltaics to increase the proportion of renewable energy for self-generation and self-consumption; • Automatic cooling of smart ice machines; • Improving the efficiency of laminator operations; • Remodelling of the wall panels in the wash area to be completely enclosed; • Putting into use the idle (used in spring and winter) closed circulating cooling water system and installing a bypass line in the main circulating cooling water line of the air compressor unit to interface with it	• Estimated electricity savings of **9.54 million** kWh for the year
Energy Storage	• Addition of temperature and pressure reducing devices; • Modification of the lighting system in the visiting corridors	• Estimated electricity savings of **10,000** kWh; steam savings of **7.66 million** tonnes for the year

Case | Chuzhou Storage Achieved Annual Steam Savings of 16.49 Million Tonnes Through Multiple Initiatives

Steam is a traditional and versatile energy source, and we face many challenges in greening it. In 2023, Trina Chuzhou Storage Factory saved approximate 16.49 million tonnes of steam, significantly reducing GHG emissions. This is achieved through technological modifications, equipment upgrading, and other initiatives.

Aeroview of Chuzhou Storage Factory

- ✓ Absorption of steam from municipal steam superheating by adding a temperature and pressure reduction device;
- ✓ Collecting steam condensate and exchange heat with the hot water system through plate exchange, and then utilize the waste heat to cool the water to be replenished to the cooling tower, reducing the consumption of tap water;
- ✓ Changing dehumidifier parameters so that the environmental parameters of the workshops are maintained close to the upper limits, reducing energy consumption.

In 2023, Trinasolar's renewable energy proportion in the total electricity consumption reached 24.09%. Suqian Optoelectronics, Suqian Techonology, Yancheng Technology, Yancheng Guoneng, Yancheng Dafeng, Yancheng New Energy, Yiwu Technology as well as factories in Changzhou and Huaian made good use of the spare space on the plant roofs to lay solar panels. This contributes to a total of 136,398 MWh of electricity, which is 2.43 times that of 2022 (56,203 MWh). On top of meeting our own operational and production demands, we also fed the surplus electric energy into the local grid network, contributing to the local energy transformation. In addition, in 2023, the proportion of renewable energy source in the electricity grid of Qinghai Province purchased from the four plants, namely Qinghai Technology, Qinghai Optoelectronics, Qinghai Crystal Silicon and Qinghai Wafer, reached 84.5%; the Viana factory purchased and used renewable energy as the source of 100% of its electricity consumption; and the Qinghai Crystal factory purchased 205,208 MWh of green electricity certificates.

Water Stewardship

Water management is crucial to the sustainable development of enterprises. Rational and efficient use of water resources helps reduce operating costs, prevent water risks, and lay the foundation for the long-term and steady development of enterprises. Deeply aware of the importance of sustainable water access and use, we have set targets of reducing the water consumption intensity of our products over the years. In addition, we have taken various measures to ensure a steady decline of water consumption intensity over the years.

Water Risk Management

Water Management Governance Structure and Measures

The Company's Board of Directors is the highest responsible and governing body for water management issue. The ESG Management Committee makes decisions on water management strategies and goals. The EHS Department oversees the implementation of water management initiatives and tracks the progress of water management goals in real time. The Power Department of each production base is the main implementer of water management initiatives.

We strictly comply with laws and regulations on water access, use, and drainage such as the Water Law of the People's Republic of China, the Water Pollution Prevention and Control Law of the People's Republic of China, the Guidelines for Water Efficiency in Key Industries, the Discharge Standard of Water Pollution for Electronic Industry, the Law on Water Resources of the Socialist Republic of Vietnam, and the Law on Water Resources of Thailand. In 2023, we completed regular reviews and updates of our internal rules such as the Prevention and Control Management Procedure of Water Pollution and the Standard for Uniform EHS Performance Data Reporting. No violations against water-related laws and regulations occurred throughout the year.

Trinasolar Water Management Goals

By 2025, the water consumption intensity of cell (tonnes/MW) decreased **20%** from the base year 2020

By 2025, the water consumption intensity of module (tonnes/MW) decreased **20%** from the base year 2020

Water Risk Assessment and Response

While complying with our Environmental Aspect Identification and Evaluation Procedure, we have adopted the Aqueduct Water Risk Atlas from the World Resources Institute (WRI) to evaluate water risk levels in areas where our 23 production bases stably operate at home and abroad. The results are as follows:

WRI Water Risk Level	Number of Production Bases	Production Base List
Extremely high (4-5)	3	Vietnam Taiyuan factory, Zhunger Banner Module, Vietnam Crystal Silicon
High (3-4)	17	Trinasolar, Changzhou Techonology, Yancheng Guoneng, Suqian Techonology, Yiwu Technology, Suqian Optoelectronics, Yancheng Dafeng, Yancheng Technology, Huaian Technology, Huaian Optoelectronics, Yancheng New Energy, Qinghai Technology, Qinghai Optoelectronics, Qinghai Wafer, Qinghai Crystal Silicon, Suqian Wafer, Trina Energy Storage
Medium-High (2-3)	2	Chuzhou Energy Storage, Thailand factory
Low-High (1-2)	1	Viana factory

We attach great importance to the water risk assessment results. All of our production bases in areas with extremely high water risk levels have taken the following initiatives to increase alternative water sources and water use efficiency. No incidents affecting production due to water shortage have occurred in our operations so far.

Production Bases with Extremely High Water Risks	Water Resource Management Initiatives[10]
Vietnam Taiyuan production base	Carry out concentrated water recycling programs; Adjust the opening of the hand valves to optimize the overflow mode and rate, so as to reduce the pure water consumption of monocrystalline cells
Vietnam Crystal & Silicon production base	Upgrade the concentrated water in the pure water system to increase the reuse rate; Increase the reuse of concentrated water, including cooling tower make-up water, fire fighting pool make-up water, watering of greenery, etc.

Water Conservation

Municipal water is our main water source. Through equipment modification, technology upgrading, reclaimed water reuse and other measures, our production bases maximize water efficiency in production and operation. In 2023, our total water consumption was 11,774,155 tonnes. Due to the Company's new production bases being put into production in 2023, Trinasolar's water consumption intensity of cell increased compared to 2022. However, it is still significantly better than the level of the base year. **Our water consumption intensity of cell was 149.94 tonnes/MW, with a decrease of 85.48% from the base year. Water consumption intensity of module product was 47.14 tonnes/MW, with a decrease of 44.40% from the base year**. As of the end of the Reporting Period, the water consumption intensity of cell and module products had reached or exceeded the water management targets we previously set.

[10] Jungar Banner Module production base is a module plant of Trinasolar, which does not involve water consumption in manufacturing.

2020-2023 Trinasolar Water Management Key Performance

Disclosure Item	2023	2022	2021	2020
Total water withdrawal (tonnes)[11]	27,687,005	-	-	-
Of water withdrawal: municipal and lake water supply (tonnes)	27,093,777	-	-	-
Of water withdrawal: withdrawals from alternative water sources (tonnes)	593,228	-	-	-
Alternative water sources proportion (%)[12]	60.05%	-	-	-
Total water consumption (tonnes)	11,774,155	14,449,496	14,020,000	10,568,000
Water consumption intensity of cell (tonnes/MW)	149.94	384.89	683.93	1,032.44
Water consumption intensity of module (tonnes/MW)	47.14	39.83	48.48	84.79
Total water recycling (tonnes)	1,349,041	454,299	-	-
Water recycling rate (%)[13]	59.18%	-	-	-

Case | Huaian Production Base Improved Wastewater Reuse Efficiency through Multiple Measures

Reuse of recycled concentrated water from the pure water system: Huaian production base adopted recycling technology for the secondary RO concentrated water and EDI concentrated water to turn them into usable resources through efficient treatment. To save tap water, the primary RO concentrate after special recycling and treatment can also be reused in non-potable water scenarios, such as backwashing, acid/alkali scrubber flushing, and toilet flushing. In this way, we are able to save water and achieve sustainable management to the fullest extent. As a result, with the recycling technology, the water production rate of the pure water system reached 71.65%, which is 10.28% higher than the designed water production rate of 61.37%.

Trinasolar Huaian production base

Collection and use of rainwater: The base collected rainwater for plant watering to save water and achieve natural recycling.

[11] Trinasolar disclosed for the first time with 2023 Sustainability Report the total amount of water withdrawal, the amount of municipal and lake water supplied, the amount of water withdrawal from alternative water sources, alternative water sources proportion, and water recycling rate.

[12] Alternative water sources proportion =(water withdrawal from alternative water sources amount + water reuse amount)/(total water withdrawal amount + water reuse amount); where water reuse amount includes water recycled amount and process colling water (PCW) amount.

[13] Water recycling rate = water reuse amount /(total water withdrawal amount +water reuse amount)

Pollution Prevention and Control

Wastewater Management

Trinasolar have classified wastewater into industrial wastewater and domestic sewage and taken corresponding measures for treatment. We make full use of recyclable wastewater, and treat unrecyclable wastewater to meet corresponding standards before discharge. We monitor the discharge of wastewater regularly and have been following the internal Prevention and Control Management Procedure of Water Pollution since its release in 2008. In 2023, we further refined the collection and statistical analysis of the total amount of wastewater and the relevant pollutants and disclosed data accordingly.

We update the water pollutant list at least once a year. In addition, we reduce water and chemicals consumption by upgrading processes and technologies and eliminating chemicals that seriously contaminate the water environment. This has helped us reduce the amount of industrial wastewater and pollutants generated. In 2023, we added new provisions to clarify that when handling safety incidents, we should take appropriate measures to prevent the direct discharge of firefighting wastewater and chemical wastewater, which may significantly contaminate water bodies, into the rainwater pipe network or water bodies.

2020-2023 Trinasolar Wastewater Management Key Performance

Disclosure Item	2023	2022	2021	2020
Total Industrial Wastewater Discharge (10,000 tonnes)	1,591	1,075	833	-
Total Chemical Oxygen Demand Emissions (tonnes)	1,119	780	-	-
Total Ammonia Nitrogen Emissions (tonnes)	125	133	-	-
Total Phosphorus Emissions[14] (tonnes)	5	-	-	-
Total Suspended Solid Emissions (tonnes)	269	202	-	-

Case | Suqian Optoelectronics Added a Defluorination System and Supporting Facilities to Reduce Fluoride in the Effluent Water

Suqian Optoelectronics has revamped its wastewater treatment system to meet elevated fluoride content requirements. With advanced technologies, this system precisely and efficiently removes fluoride in wastewater to meet discharge standards, promoting sustainable water utilization. The base previously utilized chemical precipitation approach for defluorination of wastewater. In 2023, for better fluoride removal effect, significant improvements were made to the secondary defluoridation process, such as adding defluorination dosing equipment and supporting facilities, shifting from calcium chloride to defluorination agent. The defluorination agent works by adsorbing fluoride ions in water and can reduce the fluoride content in the effluent water to 5 mg/L.

Environmental protection facilities at Suqian Optoelectronics production base

[14] Trinasolar disclosed the total amount of total phosphorus discharged from industrial wastewater for the first time from 2023 Sustainability Report.

Exhaust Gas Management

Trinasolar's exhaust gas mainly consists of greenhouse gases, particulate matters, and nitrogen oxides from the use of purchased electricity and combustion of natural gas. Optimized treatment processes, sound treatment facilities and other measures allow us to ensure that the exhaust gas meets emission standards after treatment. In addition, we regularly invite qualified third-party institutions to conduct on-site environmental tests and issue test reports.

2020-2023 Trinasolar Exhaust Gas Emissions Key Performance

Disclosure Item	2023	2022	2021	2020
Total exhaust gas emissions (billion m^3)	46.00	-	-	-
Total NO_x emissions (tonnes)	19.35	2.70	6.53	-
Total SO_x emissions (tonnes)	0.17	1.99	0.02	-

Case | Yancheng Technology Added Acid Absorption Process to Decrease Ammonia Content in Emissions by Over 10%

For the tail gas (containing a small amount of ammonia) generated from the coating process, Yancheng Technology added an acid absorption procedure to the water absorption process. In this way, the waste gas meets the emission standard after treatment by "silane burning barrel + water scrubbing + acid absorption". As a result, the residual ammonia is absorbed and neutralized to the maximum extent and the ammonia content in emissions is decreased by over 10%, helping us minimize environmental impact.

Sulfuric acid dosing device for acid absorption at Yancheng Technology base

Waste Management

Trinasolar actively fulfills the corporate responsibilities in environmental protection. Adhering to the "3Rs (Reduce, Reuse, and Recycle)" principle, we have been improving the waste management mechanism to reduce the wastes generated and ensure that all wastes get properly treated. We have set a goal of "zero" waste landfill by 2030.

In 2021, we established Yancheng Heshengliu Environmental Protection Technology Co., Ltd., which is mainly engaging in pallet production and resource recycling. This company specially serves Trinasolar and its subsidiaries, with business covering the six bases in Changzhou, Yiwu, Suqian, Huaian, Yancheng, and Dafeng. Additionally, it has been certified under the ISO 9001 Quality Management System, the ISO 14001 Environmental Management System, and the ISO 45001 Occupational Safety and Health Management System.

2020-2023 Trinasolar Waste Management Key Performance

Disclosure Item	2023	2022	2021	2020
Non-hazardous waste generation (tonnes)	201,786	118,783	35,000	-
Of which: recycled (tonnes)	190,634	113,114	-	-
Of which: landfill (tonnes)	5,550	279	2,233	2,743
Of which: incinerated (tonnes)	5,680	-	-	-
Non-hazardous waste recycling rate (%)	94	95	-	-
Hazardous waste generation (tonnes)	9,743	3,679	5,300	-
Hazardous waste transported for disposal (tonnes)	9,640	3,677	-	-

Case | Yancheng Technology Reduced Calcium Fluoride Sludge by Controlling the PH Value in Defluorination Stage

To reduce the sludge generated and discharged and the lime consumed, Yancheng Technology utilized alkaline wastewater to raise the pH value in subsequent processes and to lower the pH value at the early stage of defluoridation. Besides, Yancheng Technology reduced the dosage of polymerized aluminum chloride (PAC) by accurately controlling the pH value at the defluoridation stage, monitoring the fluoride content, and understanding the coagulation and flocculation mechanisms. During the Reporting Period, the above measures contributed to a total reduction of approximate 1,680 tonnes of calcium fluoride sludge compared with 2022. Also, these measures helped the production base to save approximate 4,273,400 RMB in lime and PAC purchases and sludge disposal.

Yancheng Technology Production Base

Packaging Material Management

Trinasolar supports and promotes material recycling, and actively works with upstream and downstream suppliers to track and recycle packaging materials of products. We have established and implemented a production-warehouse-purchase integrated package recycling process. Trinasolar recycles packaging materials such as cartons, cardboard, wood boards, plastic tubes, welded tape turnaround packages, cell turnaround packages, and glass and iron pallets.

Production	Purchase	Warehouse
Sort out and bundle up the recycled packaging materials	Contact the recycling suppliers based on the production and transportation situation to improve the efficiency of package recycling	Follow the internal Packaging Material Recycling Operation Guideline to submit the information and quantity of products of which the packaging materials are to be recycled and the actual recycling records every day

Employees and Community

Valuing the well-being of every employee, Trinasolar strives to create an inclusive and caring corporate culture, and helps employees grow together with the Company through systematic talent training and development plans. Along with being a good employer, in 2023, we stood out in the global renewable energy industry and were awarded the "Global Attractive Employer" by LinkedIn for 2 consecutive years. We are highly aware that business prosperity comes from society and should also give back to society. Therefore, we are committed to working together with all forces to build better communities characterized by shared benefits and to create a better future.

03

Total number of employees
43,031

Total number of foreign employees
3,429
7.97% of total employees

Total number of minority employees
1,875
4.36% of total employees

Percentage of female employees
26.06%

Annual training hours per employee
22.09 hours
14.44 hours increase from 2022

Occupational health and safety investment
67.63 million RMB

Total community contributions and charities investment
10.97 million RMB

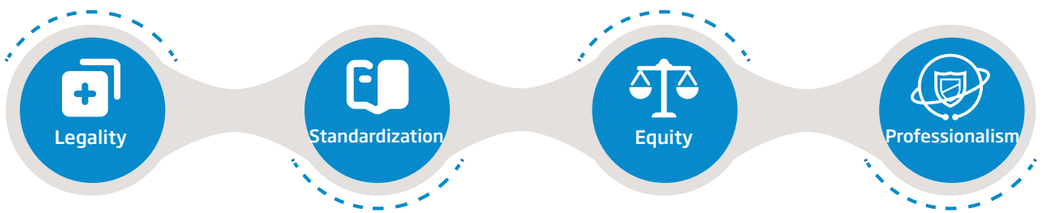
Diversity and Inclusion

As an international enterprise, Trinasolar's business footprint extends to many countries and regions, with employees from diverse backgrounds. On this basis, by continuously promoting diversity, we hope to create an inclusive environment with equal opportunities, and attract and retain diverse talents, so as to create long-term and sustainable business and social value.

Diverse Employment

Trinasolar strictly abides by international labor standards, the Labor Law of the People's Republic of China and other laws and regulations. We have formulated and improved internal policies such as the Regulations on Social Recruitment Management. Such policies have specified that any discrimination against race, ethnicity, religion, gender, sexual orientation, etc. is prohibited in the recruitment, promotion, training, and dismissal of employees. The policies also stress gender equality and equal pay for equal work, to ensure that employees enjoy an open, fair and just workplace as well as development and promotion opportunities. It is also required in our Employee Handbook that all employees should respect each other, and any discrimination and harassment should be strictly prohibited. Through a series of training sessions and awareness-raising programs, we ensure that employees all over the world study and understand Trinasolar's requirements and attitudes toward anti-discrimination, anti-harassment, and diversity. **As of the end of 2023, the proportion of female employees of Trinasolar reached 26.06%, the total number of foreign employees was 3,429, and the total number of ethnic minority employees was 1,875**.

Four Principles of Trinasolar Social Recruitment Policies



Talent Attraction and Retention

Trinasolar absorbs talents through diverse channels to build diverse teams. We conduct annual talent inventories, and analyze the gap between existing talents and the talents required for our strategic development, in order to carry out recruitment accordingly. Except for traditional campus recruitment and social recruitment, in 2023, the Company updated Chinese and English versions of the Internal Referral Award Policy, the SAL Non-Directive Deployment Management System and the Headhunting Channel Management Policy to fully construct a talent team that meets the Company's development needs.

Enterprise-University Partnership

Campus recruitment is an important channel for enterprises to reserve talents. Trinasolar continues to promote the Rising Sun Program, utilizing campus recruiting opportunities to recruit talents from diverse backgrounds. In addition, we provide diverse and informative onboarding training for new talents, helping them realize the role change from students to Trinasolar employees. In 2023, there were 1,253 employees hired through the Rising Sun Program, achieving 118% of the goal set in the beginning of the year.

Furthermore, we cooperate with Soochow University, Nanjing University of Information Science and Technology, Qinghai Institute of Technology, Jiangsu University School of Materials Science & Engineering and other universities to attract talents for the "Future Engineer Program". We also pioneer in cooperating with domestic leading business schools to attract interdisciplinary talents.

Overseas Recruitment

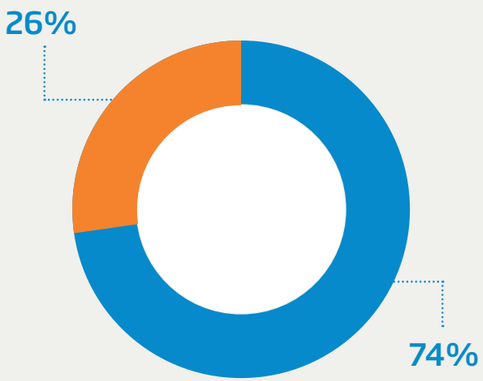
With the acceleration of global industrial planning, Trinasolar actively expands ways and channels of overseas talent recruitment. In Southeast Asia, Trinasolar has earned a good reputation based on excellent employment mechanism.

Case | Offline Campus Recruitment Conducted with Nanyang Technological University, Singapore

To attract more talents for business growth in the Asia Pacific region, Trinasolar together with Nanyang Technological University (NTU) organized the 2023 offline campus recruitment activity. Entering the campus for more cooperation opportunities between the Company and universities, we promote talent flow through good university-enterprise interaction. Getting close to students to build a bridge between the Company and talents, we listen to the most real talent development needs to enhance talent attraction.

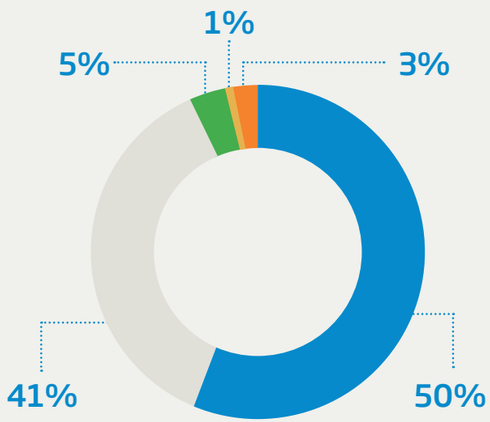
2023 Trinasolar Employment Key Performance

Percentage of employees by gender at the end of the reporting period



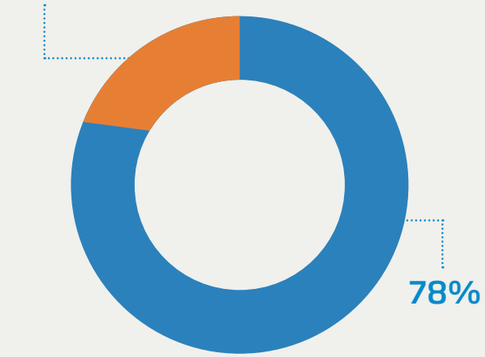
- Male 31,816
- Female 11,215

Percentage of employees by age at the end of the reporting period



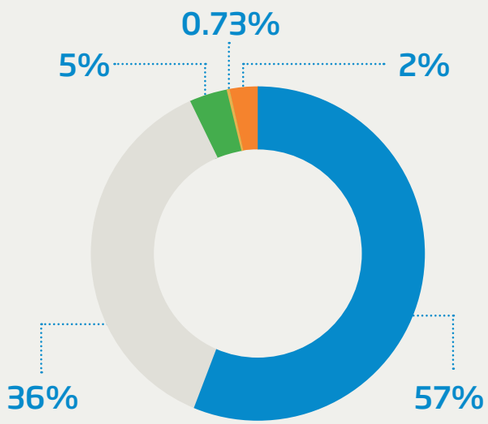
- 18-20 1,418
- 21-30 21,526
- 31-40 17,499
- 41-50 2,274
- Over 50 314

Percentage of new employees by gender at the end of the reporting period



- Male 21,561
- Female 6,249

Percentage of new employees by age at the end of the reporting period



- 18-20 1,330
- 21-30 15,867
- 31-40 9,912
- 41-50 656
- Over 50 45

Talent Retention

Non-directive deployment is an important part of talent flow within Trinasolar, as well as an important measure to build a good talent retention mechanism. In 2023, Trinasolar updated the SAL Non-Directive Deployment Management System, to encourage employees to actively apply for the Company's open recruitment positions for more career and growth opportunities based on their own development plans. Trinasolar hopes that efficient internal talent flow can promote the experience and expertise to freely exchange within different departments to support the Company's strategic goals. During the Reporting Period, there were 12,818 employees realizing job rotation through non-directive deployment. In 2023, the voluntary turnover rate of Trinasolar employees retained for more than 1 year was 17%.

Employee Rights and Benefits

Employee rights and benefits are key issues in Trinasolar's sustainable development. The Company continues to protect labor rights and builds a comprehensive welfare system to ensure employees' physical and mental health, life quality, and career development, thereby enhancing employee satisfaction and innovation, and contributing to the Company's sustainable and steady development. The Company publishes the **Trinasolar Global Human Rights Principles** and the commitment to respect human rights covers issues such as the prevention of human trafficking, prohibition of forced and child labor, working hours and minimum wages, supply chain responsibility, environmental stewardship, product responsibility, diversity and non-discrimination, prohibition of harassment, freedom of association and collective bargaining, and the right to privacy and freedom of expression.

Safeguarding Labor and Human Rights

Trinasolar endeavors to protect the rights and interests of all employees from being infringed. Trinasolar strictly complies with national laws and regulations such as the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, and the Provisions on Prohibition of Child Labor. We pay attention and refer to international human rights conventions and labor standards such as the United Nations Guiding Principles on Business and Human Rights, and have developed and continuously improved our internal rules and regulations. We have also incorporated the protection of human rights and labor rights into the Code of Business Conduct and Ethics for Employees and the Supplier Performance Management Code.

The Company prohibits to use child labor and forced labor. We actively protect the basic rights and interests of employees through multi-round of information audits, background checks by internal or third-party organizations, and regulations on working hours and overtime approval processes, which are defined in the Employee Handbook. In addition, we have incorporated social issues such as child labor, forced labor, and human rights into our supplier social responsibility assessment methods and supervise our suppliers to refrain from employing child labor and forced labor. In 2023, Trinasolar did not have any incidents of child labor, forced labor, or other violations.

The Company signs labor contracts with employees in accordance with the law and regulations, clearly stipulating the rights and obligations of both parties. During the Reporting Period, our signing rate of labor contracts was 100%. Trinasolar strictly follows the Trade Union Law of the People's Republic of China and respects employees' rights to participate in independent labor unions, rights of collective bargaining and freedom of association. In this regard, we have established labor union committees and employee representative assemblies to protect the legitimate rights and interests of our employees. Adhering to the principles of legality, fairness and honesty, we sign the Collective Contract with the Company's labor union committees. The contract clarifies provisions for labor management, labor remuneration, working hours, rest and vacation, labor safety and health, special protection for female employees, social insurance and benefits, modification, rescission and termination of contract, etc.To create a fair and open working atmosphere, we have set up complaints channels that are set out in the Employee Handbook to inform all employees. In case of human rights violations, discrimination, injustice and other incidents, employees can directly report or complain to supervisors, department managers, Human Resources Department or labor unions, or give feedback through online channels such as the suggestion box and WeCom. Direct supervisor, department manager and Human Resources Department should solve employees' issues or give reasonable explanations for the reporting request. If not satisfied with the solution, the employee may complain to the direct supervisor at a higher level. The direct supervisor, the direct supervisor at a higher level and the Human Resources Department will discuss the complaints and reply to the employee within 5 working days. The entire complaint process and all relevant information will be kept strictly confidential.

Employee Rights

Upholding the core values of "Share the Responsibility, and Create and Share Value Together", Trinasolar listens to the demands of employees, and improves the compensation system and benefits based on their needs, so that they can fully feel the care from Trinasolar.

Compensation System

We strictly abide by the relevant wage management laws and regulations in each place of operation, and have also set up a Human Resources Management Committee (HRC). The committee is committed to continuously improving the compensation structure, compensation level and incentive system. Based on the market-oriented pay principle, employees are provided with a fair, just and competitive remuneration, to attract, cultivate, retain and motivate well-performed employees.

The Company adopts a variable performance-based pay mechanism, which considers both individual performance and corporate economic benefits, to improve employees' enthusiasm. Employees' compensation, including basic salary, merit pay, allowances, overtime pay and bonuses, varies according to their position, work experience, competence, work performance, corporate performance, etc. **In September 2023, the Administration System of Stock Incentive Scheme was initially released, with 31% of non-frontline-production employees participated**.

Employee Benefits

Trinasolar pays attention to humanistic care, by providing people-centric benefits for each employee, to continuously improve their happiness and sense of belonging.

Statutory Benefits

- ✓ Endowment Insurance, Medical Insurance, Unemployment Insurance, Employment Injury Insurance, Maternity Insurance, and Public Housing Funds; Paid Annual Leave
- ✓ In 2023, the social insurance coverage rate of Trinasolar employees was 100%.

Featured Benefits

- ✓ Annual health checkup
- ✓ Purchased commercial insurance, with 100% coverage rate of our employees
- ✓ Benefits for traditional festivals
- ✓ Consoled 2,991 employees in high-temperature and hardship areas
- ✓ Care for employees in hospital
- ✓ Emergency assistance and consolation
- ✓ Rich cultural and sports activities, with 8 clubs in operation, and 120 activities organized
- ✓ Excellent staff selection and incentive

Care for Female Employees

- ✓ Organized the annual "breast cancer and cervical cancer" examination for all female employees
- ✓ Provided customized practical wedding or maternal gift packages for female employees who got married or gave birth
- ✓ Established the "carnation" service center for female staff experiencing "menstruation, pregnancy, perinatal period, lactation, or menopause"
- ✓ Provided more flexible and people-oriented work arrangements for women who are pregnant for more than 7 months

In 2023

Employees who took parental leave

323 employees

male: 194; female: 129

Employees who took parental leave and returned to work for more than one year

296 employees

male: 175; female: 121

Event Information
Suqian Base 2023 Winter Ball Athletic Competition Completed
Struggle and Strength during Golden Autumn Show

Event Information
Trina Power's First "Zero-Carbon Cup" Autumn Sports Meeting Successfully Completed
Peak Match, Dream Realized

Case | A Psychological Hotline Opened to Care for Mental Health of Employees

As the pace of life and work accelerates, companies and employees are increasingly concerned about mental health. In 2023, we set a psychological hotline to provide one-on-one counseling services for employees. If there are problems in career development, interpersonal communication, emotional distress, etc., employees can speak to counselors to ensure that the problems are solved in time to protect their mental health.

Trinasolar psychological hotline poster

Employee Communication

The Company implements an open-door policy and respects every employee's opinions and suggestions on the Company or work. We provide diverse and clear communication channels for employees, and encourage them to put forward reasonable suggestions or opinions to help the Company improve management and productivity. **By the end of the Reporting Period, the Company had collected 89 effective suggestions and adopted 79 suggestions according to feasibility, effectively improving the economic benefits**.

We hold regular staff and departmental meetings to discuss the Company's operations, product and departmental issues, etc., providing employees with face-to-face communication opportunities with management. We organize employee satisfaction surveys from time to time to understand employees' opinions and suggestions on the Company's operation and development, so as to empower management improvement.

We have also set up online communication platforms such as "headquarters employee communication window" and mailbox, through which employees at all platforms and levels of the Company can contact the headquarters. **In 2023, we received more than 200 consultations or complaints about vital interests through WeCom, mailbox and other channels, involving accommodation, catering, wages, and assessment, which were 100% handled**.

Employee Training and Development

Trinasolar consistently regards talent training and promotion as a key driver to the Company's sustainable development. Specifically, we ensure our creativity and competitiveness by improving the holistic quality of our employees and the incentive mechanisms.

Talent Training

To strengthen the talent pool and talent pipeline, Trinasolar continues to improve the Training Management System, enhance the distinctive internal training system for all employees, and provide highly job-appropriate training courses for department supervisors, new employees, trainees and other groups. The courses cover compliance training, safety knowledge training, professional quality and ability training, professional skills training, leadership training, and other content to continuously improve the knowledge and business ability of employees.

In 2023, Trinasolar reached cooperation with Yunxuetang, a digital provider of enterprise learning solutions, to explore a new system of digital learning and talent cultivation. By the end of the Reporting Period, the learning platform had been visited for 3,986,856 times throughout the year, with 7,438 logins per month on average and a total learning time of 10,325,065 minutes. At present, a total of 1,050 courses with 3,817 learning materials are accessible on the platform. In addition to the orientation training at each base, the platform provides training courses on core corporate values, business ethics, information technology, compliance, work safety, occupational quality, professional skills, leadership and other topics. Therefore, we can continuously enhance employees' knowledge reserve and business competence. During the Reporting Period, highlight courses on our online learning platform included:

Trainees	Highlight Courses
New employees	Training for new joiners on EHS, corporate brands, internal systems, product information, information technology, business ethics, etc.
Highly-potential managers/ existing managers	Training on Trinasolar's core values, efficient execution for managers, Thematic training of "Attitude Is Everything", customer insight, commercial design and "Organizational Innovation: Outlining a Roadmap to a Market-Oriented and Eco-Friendly Organization", etc.
Employees from each business unit and functional department	EHS Department: Training on the EHS management system and internal audit, environmental protection, work safety responsibility, etc. Quality Department: Training on the quality management system, interpretation of quality management maturity and corresponding evaluation methods, quality risk management and indicator management, quality management system for internal auditors, refinement and innovation, etc. HR Department: Training on theoretical and practical insight into core values, approaches and practices of role perception, etc. ...

In 2023

the training hours per employee of Trinasolar amounted to

22.09 hours

increased by 14.44 hours compared to 2022

Employee training satisfaction reached

4.83 points

on a 5-point scale, increased from 4.76 in 2022

2023 Trinasolar Key Training Programs for Leadership Development and Management Empowerment

Trinasolar GMDP Training Program for Middle and Senior Leadership Development	Trinasolar actively enhances the awareness of the roles and responsibilities of middle and senior executives, focuses on the shared responsibility of "the role of middle and senior management", and carries out the GMDP training program for middle and senior leadership development. From October 21, 2023 to December 15, 2023, we empowered leadership capability of 26 management personnel newly promoted in the first half of the year. They completed all the learning courses with 20.6 learning hours per capita. They finished all the assignments and submitted 115 practical cases cumulatively. All of them completed the 2 months of online and offline learning, with a 100% passing rate for their studies.
Trinasolar FLDP Training Program for Middle and Junior Management Empowerment	We smooth the path of talent development and continuously cultivate management staff who meet Trinasolar's values and development needs. In 2023, the total learning hours of all trainees exceeded 1,700 hours, with learning hours per capita at 34.1 (up to 57 hours), learning progress per capita at 95%, and an assignment submission rate at 99%. Among all trainees, 52 participants finished the learning courses with a passing rate of 100%.

Trinasolar GMDP Training for Middle and Senior Leadership Development

Trinasolar FLDP Training for Middle and Junior Management Empowerment

In addition, youth talent training serves as a strategic cornerstone for the sustainable development of a company. Therefore, Trinasolar gains ceaseless momentum in enhancing creativity and competitiveness by cultivating next-generation talents in a systematic approach. Specifically, Trinasolar has launched the "Pathfinder Training Program" with a focus on youth talents. **During the Reporting Period, the Company held 3 sessions of Frontline Training at the headquarters, covering a total of more than 150 participants. The program was also carried out in all business units throughout the year, covering a total of more than 250 participants. Besides, the "Pathfinder Pro Program" attracted 132 participants in 2 training sessions, and the "Blazing Sun Project" involved 35 people**.

2022-2023 Trinasolar Employee Training Key Performance

Disclosure Item		2023	2022
Average hours of training per employee[15]			
Training hours per capita by level	Senior Management	13.27	116.04
	Mid-level Management	15.91	74.96
	Ordinary Management	12.67	26.32
	Ordinary Employee	22.66	5.52
Training hours per capita by gender	Male Employee	22.35	7.59
	Female Employee	21.39	7.81
Percentage of employees trained[16]			
Percentage of employees trained by level	Senior Management	42%	2.49%
	Mid-level Management	41%	7.47%
	Ordinary Management	43%	11.61%
	Ordinary Employee	44%	78.43%
Percentage of employees trained by gender	Male Employee	46%	74.24%
	Female Employee	39%	25.76%

[15] The formula for the average hours of training per employee is the total employee training hours/ the average of the number of employees in this type at the end of 2022 and the number of employees in this type at the end of 2023.

[16] In 2023, the formula for the percentage of employees trained was adjusted to take into account the existence of trainee departures, and the percentage of employees in each type of training was (total number of employees in that type of training (including departed employees) * (1 - the overall company turnover rate)) / the number of employees in that type of training. The formula for the percentage of employees trained in 2022 was the number of employees in that type of training / the number of employees in all types of training.

Case | Trinasolar Conducted ESG Training to Improve the Sustainability Awareness of the Management and Employees

In August 2023, Trinasolar's ESG Management Committee took the lead in organizing training activities regarding ESG basic knowledge. Adopting both online and offline courses, the training empowered the Company to better conduct business by lecturing on ESG concepts and development, ESG values, ESG practices, and ESG performance enhancement.

Moreover, we delivered EHS-related online training to our employees in 2023. During the Reporting Period, we launched a total of 9 training courses for 7,616 participants. Highlight training courses "Training Series for Safety Responsible Persons and Management Personnel" included six modules of "Training on Work Safety and Environmental Protection Responsibility", "Training on Major EHS Laws and Regulations", "Fire Safety Training", "Chemical Safety Training", "Electrical Safety Training" and "Machinery Safety Training". The EHS training has been included in employee orientation training at all business units.

Trinasolar also understands that subsidy policies for academic and qualification promotion are crucial to the talent pool construction at the headquarters and all production bases. Such policies can motivate employees to enhance their personal values, thereby ensuring the quality and sustainable development of the Company's human capital. Since the release and implementation of the External Training Management System in 2020, Trinasolar has been providing all employees with a fair external training subsidy policy. The subsidy covers diversified external training, including government training courses on laws, regulations and vocational skills, public courses on professional knowledge or expertise organized by external training organizations, domestic and international professional conferences and education for individual academic advancement.

Performance Appraisal

Employee performance appraisal and feedback as well as promotion mechanisms help to motivate employees, clarify their career path, and drive the common progress of employees and the Company. Trinasolar has developed a transparent and fair performance assessment system and implemented a multi-dimensional assessment and public feedback mechanism, so as to ensure fair and orderly promotion of employees.

Trinasolar continuously improves the personal performance management and appraisal system of the employees, and has formed the Personal Performance Management System, which establishes a linkage mechanism between performance and compensation and benefits such as bonuses, salary adjustments, promotions, and equity to create a favorable competitive atmosphere. For the performance appraisal of employees in different departments, we determine the Personal Development Plan (PDP) appraisal indexes in accordance with the employee's role and value contribution mode, in order to ensure the landing and effective implementation of the company's Strategic Planning (SP) and Business Planning (BP), and to strengthen the value assessment system oriented to the organic combination of responsible results and employee management and personal development.

Trinasolar gives employees timely feedback on their evaluation results on a semi-annual basis to help them improve and focus on future development. In terms of individual performance coaching and communication, we require that direct leaders conduct at least one round of performance coaching and communication with employees in each assessment period. The Company classifies employee performance ratings into A++, A+, A, B and C and assesses the relative performance of employees by the forced distribution method. Via the performance assessment platform, all employees under assessment can give feedback within a specified period of time on whether their direct leaders have communicated with them, whether they are satisfied with the communication, whether the assessment results are in line with their actual performance, and whether they have any suggestions for the assessment. Employees who disagree with their performance ratings may complain to higher-level leaders/HRBP. Such complaints will be proceeded within 5 working days from the date of acceptance, and feedback will be delivered to the complainant in a timely manner. Performance assessment results are widely applied as an important basis for personnel decisions such as employee performance bonus payment, salary and job level adjustment, selection of advanced employees, post-deployment, training, succession for key positions, and termination or renewal of the labor contract.

In 2023, 100% of Trinasolar's employees received regular performance appraisals.

Trinasolar Individual Performance Management Process

Career Development

Trinasolar continues to empower employees by providing more inspiring and challenging career development opportunities to help them grow with the Company. We implement the Job Qualification Management Measures to effectively establish a job qualification mechanism. In 2023, we encouraged employees to apply for positions openly recruited by the Company based on their own development plans. We also established the SAL Non-Directive Deployment Management System to help employees acquire more opportunities for career development. Thanks to these efforts, we contributed to an efficient application of employees' business experience and professional skills across departments and the Company as a whole, thus facilitating the achievement of the Company's strategic goals.

As for talent promotion, we have set up special programs for the accelerated promotion of young management personnel and the accelerated development of youth talents in key fields. We advocate to promote young employees who make outstanding efforts in business globalization, capacity expansion, technological innovation and other aspects of corporate development. This gives youth talents more opportunities to grow with the Company.

Occupational Health and Safety

The occupational health and safety of employees is regarded as an indispensable part of the sustainable development of the Company. Therefore, Trinasolar continuously improves the work safety management mechanism, and strives to maintain a safe and healthy working environment for employees by health and safety training and other means.

Work Safety Guidelines

Highlighting the occupational health and safety of employees, Trinasolar has established a sound occupational health and safety management system and constantly updated relevant rules and regulations. Trinasolar strictly abides by the Labor Law of the People's Republic of China, the Fire Protection Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, Work Safety Law of the People's Republic of China and other laws and regulations. We have also formulated internal policies such as the Safety Standard Manual and the Work Safety Management System, with which all employees and other personnel, including contractors and visitors, are required to comply. In 2023, we updated the Policy on Safety Risk, Clarification and Control by Risk Level, to better identify and assess the safety risk factors in production and operations, so as to achieve pre-control and source management of risks, thereby minimizing safety risks.

We set rational targets to facilitate management. At the beginning of 2023, the Company formulated work safety management targets and incorporated them into the 2023 Environmental Protection, Occupational Health, and Safety Target Management Responsibility Letter. In the letter, the Company and the subsidiaries are required to progressively decompose and implement these targets to improve the performance of work safety management. Meanwhile, the Company updated the Work Safety Responsibility Management System to refine relevant responsibilities of the person in charge at each level, thus efficiently putting work safety management into practice.

The Total Recordable Incident Rate (TRR) in 2023 was 0.841. During the Reporting Period, we built more than ten new pilot production bases, with insufficient new employee orientation training, running-in risks of facilities and equipment, and management pressure due to capacity expansion. Besides, there were a total of 1,175 working days lost due to work-related injuries. Trinasolar recognizes work safety as a red line of business operations. Therefore, we keep focusing on and investing in education and training on this front. We also strengthen safety drills and exercises in an effort to ensure that employees are proficient from theoretical learning to practical operation, and improve safety awareness and emergency response capabilities. **During the Reporting Period, Trinasolar invested a total of 67.63 million RMB in employee occupational health and safety, organized a total of 446 emergency drills at all of our production bases, conducted occupational health training sessions covering 151,984 participants of both Trinasolar employees and outsourced suppliers**.

Trinasolar's Chinese and overseas plants have institutionalized occupational health and safety management and have all obtained ISO 45001 Occupational Health and Safety management System Certification except the Vietnam Crystal Silicon[17]. We have established a long-term global safety accident management mechanism and optimized the Work Safety Accident Investigation Management System among others. All plants worldwide are required to report safety accidents within a specified time frame, to analyze the causes of incidents, and to take preventive and corrective measures in a timely and targeted manner, thus reducing safety accidents. By the end of 2023, Trinasolar had no work-related fatalities for three consecutive years.

[17] The Vietnam Crystal Silicon base was put into operation in September 2023. Trinasolar plans to obtain the occupational health and safety management system certification for the base as soon as possible in 2024.

Employee Health and Safety

Trinasolar strictly abides by the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, and has formulated and implemented the Occupational Health Management Procedure and the Safety Education and Training Management System. By virtue of adequate protective measures for occupational health and awareness improvement on health and safety, the Company works to safeguard employee health and safety.

Ensuring Occupational Health

The Company continues to improve labor safety and hygiene conditions in the workplace by providing employees with comprehensive and portable personal protective equipment (PPE) free of charge and requiring them to wear the PPE correctly in accordance with the Personal Protective Equipment Management Procedure. We inform employees of possible hazards and consequences of occupational diseases, as well as protective measures and treatment of such diseases, as much as possible when they sign the labor contract. We designate qualified third-party agencies to carry out regular inspections on occupational hazards in each workshop. In addition, we arrange health check-ups every year for employees exposed to occupational disease hazards.

In 2023, we organized a total of 446 emergency drills at all of our production bases. These drills simulated real incidents and emergency response processes from multiple dimensions such as fire evacuation, chemical spillage emergency response, first aid training and assessment, thus providing a reference for employees to deal with unexpected incidents in the future.

Fire evacuation emergency drill in the workshop of Yancheng production base

Awareness Improvement on Health and Safety

With a focus on employee education and training in work safety and occupational health, Trinasolar actively conducts internal safety training, including refresher training, on a regular or non-regular basis. By doing so, Trinasolar aims to help employees master Trinasolar's various health and safety systems and improve their health and safety awareness. Fire fighters, high voltage electricians, forklift operators and those engaging in other special positions are required to participate in pre-service training and obtain special qualifications and licenses before they officially start the operation. **In 2023, Trinasolar conducted 5,711 occupational health training sessions with a total of 64,559 training hours, covering 151,984 participants of both Trinasolar employees and outsourced suppliers**.

Furthermore, we push EHS messages via the WeCom platform and organize quality month activities to impart knowledge about work safety and occupational health in daily work in an interesting manner. As a result, we are able to improve employees' safety awareness and behaviors imperceptibly. In 2023, Trinasolar pushed a total of 58 safety messages via the WeCom EHS platform.

Safety messages of Trinasolar

Community Commitment

Adhering to the original mission of "Solar Energy for All", Trinasolar undertakes corporate social responsibilities and gives back to society with practical actions. **In 2023, our total community contribution and philanthropic investment amounted to 10.97 million RMB**.

Working Together to Deliver Warmth

As a global leader in smart solar energy and storage solutions, Trinasolar gives full play to our strengths in product, resource and platform. Therefore, the Company is able to support the low-carbon transition in various industries and come up with feasible solutions for zero-carbon practices in the industrial and commercial sectors. Trinasolar protects the environment with low-carbon development and empowers the global transition to greener energy.

Case | PV storage + Textile
Trinasolar Applied PV Storage Solutions in the Textile Industry for a Greener Future

As green development gains momentum, a range of textile enterprises embark on a green transition with clean energy. By virtue of the strength in smart solar energy and storage solutions, Trinasolar has been fueling the green transition of the textile industry over the years.

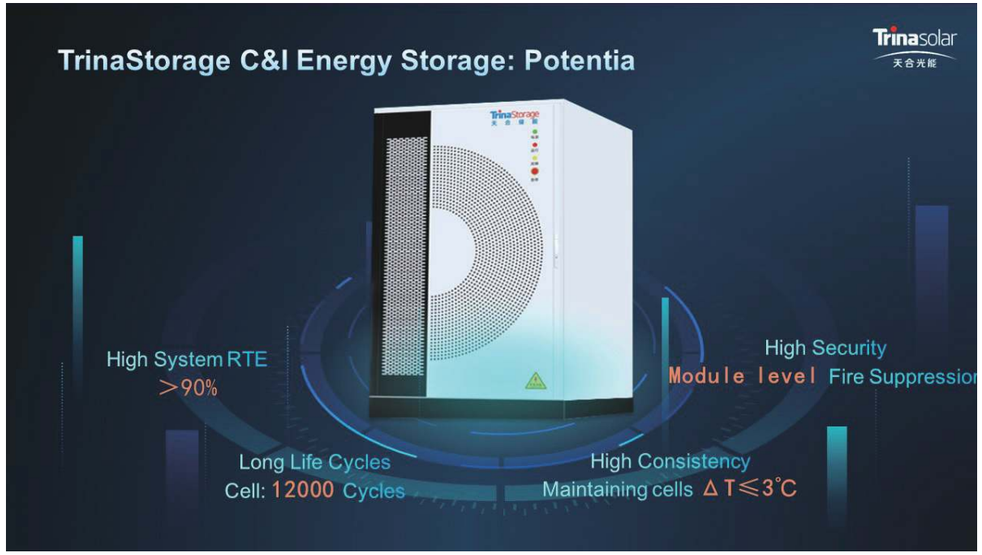
In September 2023, Trinasolar cooperated with Shangrao Delong Textile Co., Ltd. in a rooftop PV project. The project was equipped with Trinasolar's Vertex 600 W+ series ultra-high power modules with a total scale of 28 MW. The project is expected to generate over 275 million kWh of electricity on average every year after being connected to the grid. Besides, it is expected to reduce 22,880 tonnes of carbon dioxide every year, equivalent to 1,271,112 trees newly planted per year. In total, the project is estimated to trim the power expenditure by nearly 21 million RMB every year.

The rooftop PV project of Shangrao Delong Textile Co., Ltd.

Case | PV storage + Steel
Trinasolar Launched a Green Plan for upgrade of the Steel Industry

As a key pillar industry that supplies basic raw materials to the construction, machinery, automobile and other sectors, the steel industry in China is confronting enormous pressure of structural upgrading and green transition. Based on the wide distribution of PV resources and the flexibility of PV power generation, Trinasolar has developed a "PV storage + steel" solution to inject new vitality into the green development of the steel industry.

At the 19th China Steel Industry Chain Summit in November 2023, Trinasolar released 210+N modules, a green PV storage solution for the steel industry, and Potentia, an energy storage solution for the industrial and commercial sectors. With such solutions, the Company drives the steel industry towards cost reduction and efficiency improvement, and makes constant innovations to lead the green transition of the industrial and commercial sectors. At the summit, Trinasolar was awarded the title of "2023 Green Steel Industry Contributor".



Potentia - Trinasolar's new energy storage product for the industrial and commercial sectors

Rural Revitalization

In response to the national strategy of rural revitalization, Trinasolar contributes to educational development and steps up rural development.

Case | Trinasolar's Suqian Production Base Donated 3 Million RMB to Support Education in Suqian

Suqian of Jiangsu Province is one of Trinasolar's key operational locations. Paying adequate attention to the operating site, we donated 3 Million RMB to the Jinji Lake School in the Suqian National Economic and Technological Development Area as an effort to promote the high-quality development of regional education. On the one hand, the donation can help students from needy families to complete their studies. On the other, it supports the school to improve educational conditions and introduce high-level talents. The school extended its gratitude to Trinasolar and sent a banner to the Suqian production base.

Trinasolar's Suqian production base received a banner with the slogan "Great Virtue for Education Assistance"

Case | TrinaTracker Carried out Supportive Educational Activities in the Kela Elementary School in Sichuan Province

Trinasolar has established connections with the Kela Township since the construction of the Kela PV power plant. As the world's largest hydro-solar complementary project, the plant is also a key project of Sichuan province's renewable energy development plan in the "14th Five-Year Plan". The project is equipped with 300 MW of TrinaTracker's pioneer 2P trackers.

Donation ceremony at the Kela Elementary School

Trinasolar focuses on the local education. On the International Children's Day, TrinaTracker joined hands with representatives and volunteers from Yalong River Hydropower Development Co., Ltd. and Sichuan Volunteer Service Foundation to carry out voluntary activities. Themed on "Great love is like water to support the boat of dreams", these charity activities were organized in the central school of Kela Township, Yajiang County, Sichuan Province. The Company donated teaching materials to the school, and daily necessities to needy students, thus supporting local education for rural revitalization. Volunteers organized a series of interactive activities for students on handicraft, science publicity and other topics, so as to support the healthy and happy growth of left-behind children.

Integrity and Compliance

In the pursuit of outstanding business achievements, Trinasolar always regards integrity and compliance as the foundation of the enterprise and has been moving forward steadily. We actively promote in-depth collaboration with suppliers and partners to build sustainable supply chain. We firmly believe that only by deeply rooting the value of integrity in every aspect of corporate governance can we truly achieve good governance; likewise, we can only gain the trust of all parties with fair and transparent operations.

04

Percentage of Independent Director

42.9%

The percentage of suppliers assessed with supplier EHS and social responsibility audit

95.67%

The percentage of suppliers who have signed the Supplier Social Responsibility Commitment

95.67%

ESG terms are specified in contracts with suppliers

Honored with the title of **"National Green Supply Chain"** by the Ministry of Industry and Information Technology as well as the **"National Supply Chain Innovation and Application Demonstration Enterprise"**

Require suppliers to communicate the environmental and human rights requirements set out in the Supplier Code of Conduct and the ESG-related clauses specified in the contract to their supply chains

Cumulative completion of business ethics audits at headquarters and home and overseas subsidiaries and bases

26

Completion rate of business ethics report processing

100%

Obtained **ISO 27001 Information Security Management System Certification**

In accordance with the requirements of **General Data Protection Regulation (GDPR)** of the EU, we signed the Outbound Data Transfer Agreement with data processors to help Trinasolar export

Obtained the **ISO 37301 Compliance Management System Certification** in February 2024

Corporate Governance and Compliant Operation

Trinasolar attaches great importance to compliance and is committed to maintaining business reputation and ensuring sustainable development. We strictly abide by local laws and regulations, international conventions and business ethics to ensure that our operations are legal, fair and transparent.

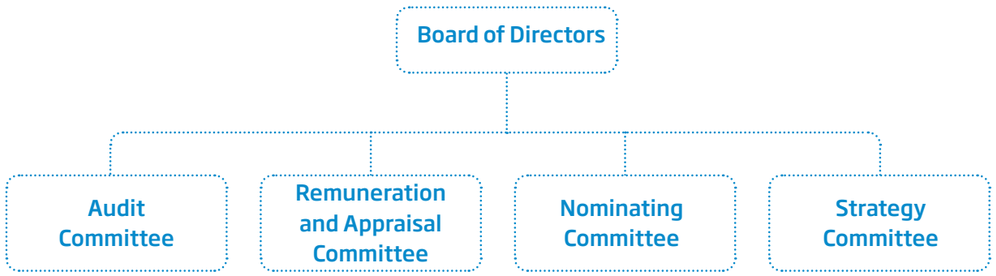
Corporate Governance

Trinasolar regards corporate governance as a key part of business development. Therefore, we have made continuous efforts to ensure transparent decision-making, controllable risks, and balanced rights and interests, so as to maintain the market trust and ensure long-term and steady development.

Diversity, Independence and Responsibility of the Board of Directors

We consistently comply with the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Rules Governing the Listing of Stocks on the Science and Technology Innovation Board of the Shanghai Stock Exchange, and other legal provisions related to corporate governance, ensuring the sound operation of the Company and protecting the interests of shareholders and stakeholders to the greatest extent possible.

As the core of the governance structure, the Board of Directors is responsible for participating in and deciding on all major issues relating to the Company's operations, including policy, strategy, budget, internal control and risk management. On this basis, 4 Board Committees (Audit Committee, Compensation and Evaluation Committee, Nominating Committee, and Strategy Committee) are appointed and delegated by the Board as the oversight and implementation bodies of the governance structure, and operate effectively in accordance with their terms of reference.



To strictly comply with relevant provisions such as the Measures on the Administration of Independent Directors of Listed Companies, the Code of Corporate Governance for Listed Companies, and the Articles of Association of Trinasolar, we have issued and implemented the Independent Director Working System. In this document. the independent directors' responsibilities, independence, nomination, election and replacement, performance of duties, as well as their obligations have all been defined. By the end of the Reporting Period, the Company's Board of Directors consisted of three independent directors and four non-independent directors, with 42.9% of independent directors. The Company holds at least one annual general meeting and at least two regular meetings of the Board of Directors each year.

Trinasolar attaches great importance to the diversity of the Board of Directors, and continues to build a diverse and professional Board of Directors in multiple dimensions such as gender, age, culture and educational background, professional development, tenure of service, industry experience, and understanding of Trinasolar. By the end of the Reporting Period, all the seven directors of Trinasolar were male. However, in January 2024, Trinasolar completed the election of the third Board of Directors through a cumulative voting system; among them, Jiang Hongzhen is a female Director. In the future, when selecting and appointing directors, we will consider multi-dimensional considerations in terms of gender, age, educational background, and industry experience in order to diversify the Board of Directors and improve decision-making efficiency and corporate governance. In addition, there is currently one female supervisor on the Supervisory Committee.

During the Reporting Period

General meetings of shareholders
6

Board meetings
23

Special Committees meeting
9

Audit Committee meeting	Remuneration and Appraisal Committee meeting	Strategy Committee meeting	Nominating Committee meeting
5	2	1	1

In 2023, the Company conducted a number of training sessions for all members of the Board of Directors, the Supervisory Board, and other members of the Management to convey regulatory compliance requirements in multiple forms, thereby promoting the sustainable development of the Company.

Brief on Directors' Training

March 2023
Special training on "policy interpretation of registration system reform of listed companies" by China Association for Public Companies

August 2023
Special training on "symposium on release of the independent director information database and reform of independent director system" by China Association for Public Companies

November 2023
Special training on "reform of independent director system of listed companies in Jiangsu Province" by Jiangsu Association for Public Companies

Investor Relations

We are always committed to enhancing market trust through effective communication. Besides, we make great endeavors to guide capital expectations and maintain stable market value, so as to promote the long-term development of the Company. During the Reporting Period, Trinasolar carried out several share buybacks, with an expectation to enhance the earnings per share, stabilize the share price, and deliver returns to investors.

We focus on enhancing direct interaction and communication with investors, and guide medium and small investors to deeply understand the investment value of listed companies. In addition to arranging special persons to answer the investor hotline and answer investors' questions on the Shanghai Stock Exchange's "SSE E-Interaction" platform, we also organize roadshow activities at the SSE Roadshow Center. Under the premise of strict compliance with the information disclosure system and requirements, we offer relevant information to enhance investors' understanding of the Company. During the Reporting Period, Trinasolar was awarded the level-A honor in the evaluation of information disclosure for 2022-2023 by the Shanghai Stock Exchange.

Case | Investors Visit Trinasolar to Gain Insight into Enterprise Development

In May 2023, Trinasolar held an activity "Investors into Scientific and Technological Innovation Listed Companies in Jiangsu Province". In the activity, more than 20 medium and small investors visited Trinasolar for on-site research and had in-depth communication with the Company's management staff.

Through the activity, we further broadened the communication channels between the Company and small and medium sized investors, and also enhanced the relationship between both. In addition, the activity also helped investors establish the concept of "rational investing, long-term investing, and value investing", which facilitated the market recognition and value realization of the Company.

Investors visited Trinasolar's exhibition hall

Investors had in-depth communication with management staff

Compliance Management

Trinasolar adheres to the business ethics of honesty, trustworthiness, law-abiding and fair competition, and is committed to establishing a professional and industry-leading business ethics compliance system, building a sustainable culture of integrity and business ethics, and ensuring that it adheres to the highest standards of business ethics in its interactions with various stakeholders. In February 2024, Trinasolar received ISO 37301 Compliance Management System Certification.

Compliance Management System

Trinasolar establishes and implements a three-level organizational structure (governance - management - execution & supervision) within its compliance management system. In the structure, the governance level is Board of Directors and its Audit Committee, the management level is held by the Governance Risk Compliance Committee (GRC), while the execution and supervision level includes "three lines of defense".

Organizational Structure of Trinasolar's Compliance Management System and Functions at Each Level

Governance

Board of Directors and its Audit Committee	Responsible for decision-making on compliance strategy, policy, medium and long-term goals.

Management

GRC (Governance Risk Compliance) Committee	Manages and coordinates the development of the compliance system.

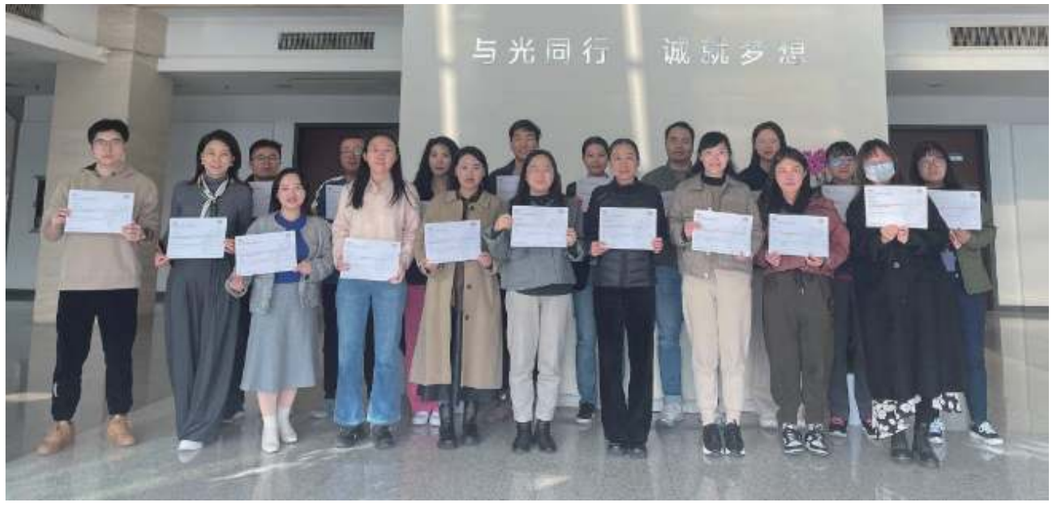
Implementation & Supervision

First line of defense	Second line of defense	Third line of defense
Supply Chain Production R&D Sales	Compliance Management Department Internal Control Legal Affairs Finance Quality EHS ..... other compliance management functional departments	Audit and Inspection Department
Each BU,MU and business department is the main body responsible for compliance management in this area	The compliance management department is the lead department, which organizes and carries out compliance management supervision Other functional departments: the main body of compliance risk management in each compliance specialization area	Independent supervisory department

From February to March 2024, Trinasolar made a systematic update of the Compliance Management System, the Internal Audit Management Measures and the Management Measures on Management Appraisal. These policies are applicable to Trinasolar as well as all wholly-owned and non-wholly-owned subsidiaries. Specifically, the Compliance Management System sets out the requirements for key compliance issues, covering employee rights and interests (e.g., compensation and benefits, anti-discrimination, health and safety, prohibition of forced labor and anti-harassment), finance and tax compliance (e.g., financial report compliance, tax compliance and anti-money laundering), listing compliance (e.g., disclosure compliance and insider dealing), integrity management (e.g., environment protection compliance, anti-bribery and corruption, business partners, anti-unfair competition, trade compliance, anti-monopoly and data compliance) and overseas compliance.

Compliance Management System Training

During the Reporting Period, we selected key personnel from all departments to attend internal auditor training on the ISO 37301 Compliance Management System. All these personnel were the backbones in the construction of the three lines of defense system for compliance management. More than 70 employees from the Company's Risk Control Management Department, Legal Department, Finance & Taxation Department, Sales Department, Supply Chain Department, Process Department, Quality Department, Information Technology Department, Human Resources Department, etc. participated in this training.



Trinasolar's internal auditor training on the compliance management system

Tax Responsibility

Trinasolar issued and implemented the Tax Management System in October 2023. Our tax vision is to pursue the best tax solutions that lead to efficient and compliant business development, accurate compliance with global tax regulations, and comprehensive protection against tax risks. We aim to build a modern, professional, efficient, and pragmatic tax management organization to create tax values.

01 We have established a trinity management organization consisting of Tax Center of Excellence (COE), Tax Business Partner (BP), and Tax Shared Service Center (SSC) and implemented four tax management principles (i.e., tax compliance principle, tax planning principle, tax risk control principle, and corporate taxpayer communication principle.) The Company attaches great importance to tax risk control and has taken multiple measures for the continuous improvement of various business processes. These measures include conducting tax "health checks", assessing tax risk exposure, and developing effective response plans;

02 Establish an effective mechanism for tax "health checks" to standardize and routinely carry out tax risk management through risk identification, risk assessment, risk response, risk management, etc.;

03 Define the responsibilities for tax risk management responsibilities in different regions and business areas. Ensure continuous reduction of the tax risks from the source and mechanism via coordination and cooperation;

04 Establish a coordination mechanism for tax audits, effectively conclude all types of tax audits, and promote improvement based on findings in tax audits.

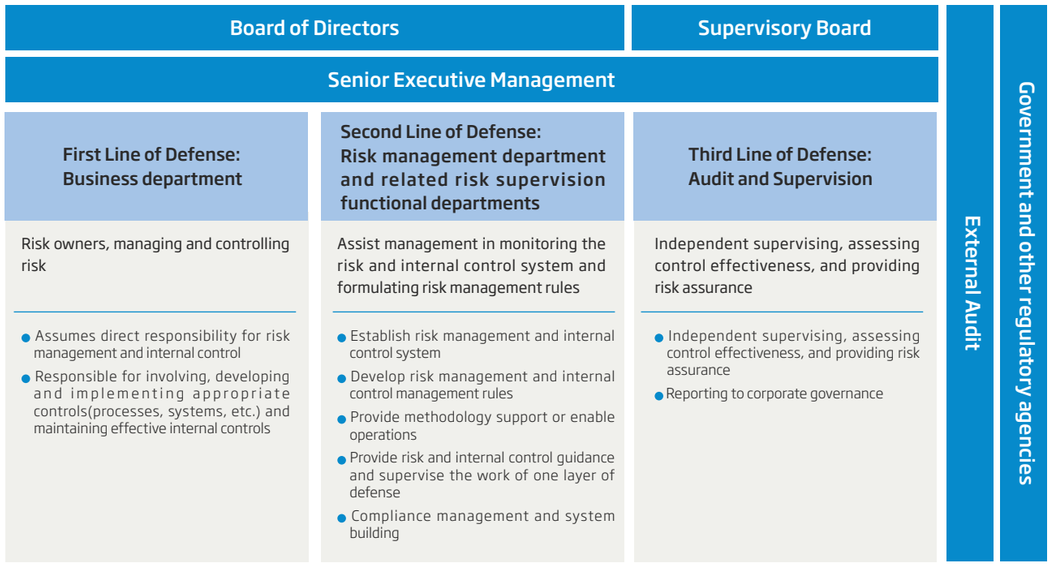
Risk Management

Risk management is at the core of a company's sound operation. By identifying, assessing and controlling risks, we can realize our strategic targets, prevent losses and enhance market competitiveness.

Three Lines of Defense

Trinasolar has built a "three lines of defense" structure led by the Board of Directors, the Supervisory Committee and the senior executive management. In addition, Trinasolar has also established a range of internal policies and management processes for risk management, including the Comprehensive Risk Management Framework, the Comprehensive Risk Management System and the Implementation Rules of Comprehensive Risk Management. In March 2024, we further optimized the Management Measures for Compliance Management Evaluation to systematically define risk measurement and assessment standards and control requirements. Meanwhile, we also launched and implemented digital risk management systems, including a risk management information system and a risk management and control system, to improve the efficiency of risk management.

"Three Lines of Defense" Structure on Risk Management



Key contents on Risk Management

Risk Management Process

Trinasolar conducts risk management maturity evaluation from both quantitative and qualitative perspectives to drive the Company continuously optimize the risk management and control system. We carry out risk assessment from the aspects of the overall risk management governance environment, risk preferences and objectives, risk management operation mechanism, risk management supervision and assessment, risk management informatization, special risk control, etc. In addition, the Company has established a four-level digital risk management process to support the effective operation of the risk management process through risk management activities, risk warning and strict control, risk management evaluation and risk management report.

Given the above risk management tools and based on the international common risk framework, internal and external risk information, the Company's business reality, etc., Trinasolar has established a corporate risk panoramic view. We divide the risks into 5 main categories, namely strategic risk, market risk, compliance risk, financial risk, and operation risk. Among them, Trinasolar has achieved continuous tracking and assessment of sustainability-related risks, including the social environment and natural disaster risk, supply chain risk, intellectual property and qualification management risk, ESG compliance risk, supplier management risk, and EHS risk.

In September 2023, we opened courses on comprehensive risk management in a bid to assist employees to apply what they learn and to fully improve the Company's resilience in risk management. These courses especially focused on online + offline management systems and digitalized systems such as the risk management information system, risk assessment standards, and comprehensive risk management evaluation norms.

Supply Chain Management

Trinasolar focuses on a sustainable supply chain, aiming to strengthen the optimal allocation of resources, reduce supply chain risks, and enhance competitiveness. We comprehensively and systematically manage each supplier level, actively urge suppliers to improve their ESG performance, and work together to build a green and responsible supply chain that promotes the synergistic development of economic, social and environmental benefits.

Sustainable Supply Chain

To ensure that Trinasolar's production and operation activities are not adversely affected by the supply of materials, we have adopted a series of proactive and effective measures to assess and respond to supply chain risks. By participating in the identification of risk points and regularly assessing and controlling them, the Company is able to identify potential supply chain risks in a timely manner and formulate corresponding countermeasure strategies to ensure the stability and reliability of the supply chain. Through the implementation of the "Supply Chain Purchasing Cost Control" program, we pay close attention to market price fluctuations and utilize advanced analytical tools and methods to enhance the foresight and accuracy of price forecasts. This not only helps us to rationally control procurement costs and avoid unnecessary losses due to price fluctuations, but also improves the delivery rate of products and ensures smooth production activities by strengthening the inventory management of main and auxiliary materials. In addition, in order to cope with the complexity and uncertainty of the international trade environment, the Company has established the "Supply Chain Purchasing Volume Guarantee" program, and conducted an in-depth assessment of the impact of international anti-circumvention investigations. By enhancing our overseas localized supply capacity, we have not only met the changes in market compliance requirements, but also further consolidated Trinasolar's market share in the global market and strengthened the Company's international competitiveness.

While adhering to high standards of business ethics, social, and environmental requirements, Trinasolar seeks to cooperate with suppliers who also follow high ethical standards and are socially and environmentally responsible. We conducted a supply chain empowerment program during the year, with courses covering supplier relationship management, project management, strategic purchase and other modules to continuously strengthen the knowledge and skills of our procurement staff.

The main types of commodities purchased by Trinasolar are raw and auxiliary materials for production, infrastructure, equipment, logistics and transportation, and IT and services. We have developed the Trinasolar's Supplier Code of Conduct, the Trinasolar Supplier Social Responsibility Commitment, the Procurement Management Guidelines, and the Supplier Classification and Grading Management Specifications to provide guidelines for full lifecycle supplier management. We include ESG-related clauses in our contracts with suppliers. During the Reporting Period, we revised the Trinasolar's Supplier Code of Conduct to emphasize that suppliers should have ISO 14001, ISO 45001 and ISO 50001 certificates or plan to obtain them, or have workable environmental, health and safety system, and energy management systems. In 2023, we further required suppliers to communicate to their supply chains the environmental and human rights requirements set out in Trinasolar's Supplier Code of Conduct as well as the ESG-related clauses specified in the contract.

Key Points of Trinasolar's Supplier Code of Conduct

EHS Management

- ✓ ISO system certification
- ✓ Statement of prohibited substances
- ✓ Employee health and safety risk assessment, job site facilities and promotion

Labor law compliance

- ✓ Prohibition of child labor and forced labor
- ✓ Working hours and voluntary overtime
- ✓ Employees should be paid no less than the local minimum wage and are entitled to statutory benefits.
- ✓ Respect for employees' right of association
- ✓ Commitment to protect employees from harassment and unlawful discrimination
- ✓ Environmental and human rights requirements for suppliers

Business Ethics

- ✓ Commitment to fair trading
- ✓ Anti-corruption
- ✓ Intellectual property protection
- ✓ Community activities and contributions

In 2023, Trinasolar strengthened the supply chain digitalization. The structure of the system is based on the ERP system and consists of sales order management (ERP-SO), supply chain planning management (SCP), Supplier relation management (SRM), manufacturing execution management (MES) and transportation management (TMS) as the main backbones. The system enables an online management of major business processes within the supply chain from the order generation to order delivery. In addition, the system enables the visualization of an order's life cycle management through integrated data.

Case | Trinasolar Becomes the First Enterprise in the Photovoltaic Industry to Hold the National Titles of Both "Innovative" and "Green" Supply Chain

During the first CISCE in December 2023, the Ministry of Commerce, the Ministry of Industry and Information Technology, the Ministry of Ecology and Environment, the Ministry of Agriculture and Rural Affairs, the People's Bank of China, the State Administration for Market Regulation, the National Financial Regulatory Administration, and the China Federation of Logistics & Purchasing jointly announced the list of "2023 National Supply Chain Innovation and Application Demonstration Enterprises". Trinasolar was successfully selected into the list.

Trinasolar has been honored with the title of "National Green Supply Chain" by the Ministry of Industry and Information Technology as well as the "National Supply Chain Innovation and Application Demonstration Enterprise" as mentioned above. As such, Trinasolar has become an enterprise that holds national titles of both "innovative" and "green" supply chain.

2023 National Supply Chain Innovation and Application Demonstration Enterprises Public Announcement List

Serial No.	Company
35	Trinasolar Limited

Supplier Selection Grading

In the supplier selection process, Trinasolar has defined different selection principles and qualification standards for different procurement types, and issued a Potential Supplier Development Questionnaire to potential suppliers. Based on the content of the questionnaire returned, we investigate the compliance, environmental and social performance, and relevant qualification documents of potential suppliers. We review the product quality of suppliers at the entry stage to ensure that the quality of products provided can meet our standards, and then sign high-level agreements with suppliers.

In addition, we also require primary and secondary suppliers and partners to sign the Trinasolar Supplier Social Responsibility Commitment at the entry stage. The commitment specifies that all suppliers and their supply chains must understand and comply with Trinasolar's policies on the environmental, occupational health and safety, and energy management, as well as Trinasolar's requirements for suppliers' code of conduct.

After the suppliers are on the list of qualified suppliers, we classify them into four levels according to business impact and market complexity: strategic suppliers, preferred suppliers, optional suppliers, and restricted suppliers, and conduct performance management with different frequencies and concerns.

Supplier Performance Assessment

During the Reporting Period, Trinasolar had established and implemented the Supplier Performance Management Code and the Guidelines for Supplier Quality Management in Product Business to evaluate suppliers' quality, price, delivery capability, and service level in an objective and fair manner, and to optimize the supplier management mechanism of survival of the fittest.

We evaluate suppliers in various aspects such as technology, quality, delivery, service, cost, innovation, social responsibility, safety, and environment according to their categories and with different weights. Furthermore, we complete an assessment and recognition of suppliers based on the evaluation results, while carrying out targeted communication and counseling, and gradually restricting procurement, freezing and eliminating suppliers that fail to improve in the long run.

Our publicly available Code of Business Conduct emphasizes the requirements and constraints on environmental and social standards of conduct for all suppliers, and provides reporting channels to encourage mutual monitoring. Suppliers' ESG performance has been fully included into the supplier performance evaluation. Trinasolar has developed and implemented the Management Procedure for Supplier EHS and Social Responsibility, which specifies that procurement staff should record the relevant supplier performance in the Supplier EHS and Social Responsibility Form. The form includes 56 assessment indicators of suppliers' performance in five areas, namely environmental protection, occupational health and safety, fire safety and emergency preparation and response, labor and human rights and business ethics, and sustainable procurement.

Trinasolar makes it clear that for suppliers/contractors who disagree with Trinasolar's requirements for EHS and social responsibility, or who fail to continuously improve their EHS level, or who do not take their social responsibility seriously, Trinasolar will require them to make rectifications within a limited period, or terminate the cooperation or take other actions.

Trinasolar Supplier EHS and Social Responsibility Audit Scoring Keys

Environmental protection	• Environmental licenses or authorization documents • Environmental management and energy management system certification • Waste water, waste gas, waste material and waste management • Environmental impacts and risk assessments • Management of plant land, groundwater and surrounding biodiversity • ISO 14001 Environmental Management System • ISO 14064 GHG emissions management - organization level • GHG emissions reduction plan • Product lifecycle management
Occupational health and safety	• Health license or approval document • ISO 45001 Occupational Health and Safety Management System Certification • Healthy and safe workplace management • Fatalities and serious injuries in the last 5 years • Cafeteria food safety • Safety license or approval document • Machinery and equipment safety maintenance • Contractor Construction Safety Management • Government fines or violations in the past 5 years
Fire safety and emergency preparedness and response	• Fire permits or approval documents • Fire drills and testing of emergency alarm systems • First aid measures and fire fighting equipment in the workplace
Labor and human rights	• Commitments, policies or statements regarding respect for human rights that comply with or are more stringent than international and national laws and regulations • Strict prohibition of child labor (including interns) • Strict prohibition of forced labor (including interns) • Freedom of association and collective bargaining • Anti-discrimination • Employee rights and remuneration management
Business ethics and sustainable procurement	• Fines and prosecutions related to business ethics • Policies for anti-corruption, anti-bribery and anti-money laundering • Reporting mechanism • Policies for sustainable procurement • Supply-chain labor due diligence • Risk assessments on the human rights and environment across supply chains

2023 Trinasolar's Core Supplier ESG Management Key Performance[18]

The proportion of suppliers who have signed the Supplier Social Responsibility Commitment	The proportion of suppliers assessed with EHS and social responsibility audit
95.67%	95.67%

Supplier Empowerment and Training

Trinasolar is deeply aware of the importance of supplier empowerment training. Therefore, Trinasolar helps suppliers enhance their skills by sharing professional knowledge and best practices in the hope that this will motivate them to improve their quality and efficiency and reduce costs. With such training, we ensure the stability and sustainability of our supply chain, thus enhancing the overall competitiveness of the Company.

Case | The 10th Supplier Empowerment Training Camp of Trinasolar

In October 2023, to further improve the management of product quality, procedure quality and process quality, Trinasolar launched the 10th Supplier Empowerment Training Camp for more than 100 suppliers under the theme of "achieve quality excellence for a brighter future and create a new ecology for the photovoltaic industry". At the camp, we provide training for our partners in three aspects, namely lean management, excellent quality, and customer success. The main contents include rapid on-site improvement (lean foundations + seven wastes), value stream, quality control circle (QCC), prevention of confusion and errors, efficient solutions to problems, 8D, basics of measurement systems analysis (MSA), and process capability analysis. With such empowerment training, Trinasolar's quality management will be taken to a new level.

The 10th Supplier Empowerment Training Camp

Conflict Minerals Management

For conflict minerals, Trinasolar has set the objective of resolutely 100% not purchasing or supporting the use of "conflict minerals". In 2015, we issued and implemented a Conflict Minerals Management Framework, which defined a 5-step process to identify potential conflict minerals in the materials we used. Meanwhile, we continue to promote key material suppliers to complete CMRT due diligence, and disclose the management performance concerning conflict minerals in annual sustainability reports.

[18] In 2023, The scope of Trinasolar's core supplier ESG management performance data for 2023 covers Cell and Module Business Unit, Rack Business Unit and Energy Storage Business Unit, and does not cover the Materials Business Unit for the time being.

Trinasolar Conflict Minerals Management Processes

Scoping of products and suppliers	Review product BOMs to identify 3TGs and corresponding suppliers
Implementation of reasonable levels of country-of-origin surveys for minerals	Adoption of a supplier CMRT questionnaire to obtain the necessary information from suppliers to assess the sourcing and procurement of 3TGs in order to meet the conflict minerals reporting requirements
Implementation of due diligence	The supplier control matrix risk assessment is carried out based on the supplier's feedback on the country of origin investigation to a reasonable degree
Issuance of findings by subsidiaries to the head office	Report on the status of conflict minerals for each subsidiary's product components, as required by the template issued by the head office
Sorting out processes	Sorting out and ensuring compliance with existing practical operational processes

2023 Trinasolar Conflict Minerals Management Key Performance

Supplies Involved in the Risk of Using Conflict Minerals	Number of Suppliers Involved in the Risk of Using Conflict Minerals	Of Which the Proportion of Suppliers Signed Non-Conflict Minerals Statement
Junction box	10	100%
Soldering strip	10	100%

Supply Chain Finance

In 2023, Trinasolar successfully built the first supply-chain finance platform "Trinasolar Financing" in China's PV industry. The platform provides core enterprises, suppliers and financial institutions with a unified financing portal that is connected to the products of various banks, thus enabling the online management of financing activities as well as real-time information on financing amount and financing progress. More than 30 million RMB was financed for suppliers on the very first day of the launch of "Trinasolar Financing". By the end of 2023, the number of enterprises connected to the platform had exceeded 300, involving manufacturers of EVA PV film, aluminum frames, plastic particles, etc.

(China PV Industry's first supply chain finance platform "Trinasolar Financing" is released on line.)

China's first supply-chain finance platform "Trinasolar Financing"

Anti-Corruption and Business Ethics

Trinasolar is concerned about anti-corruption and business ethics, and is committed to ensuring fair competition. The Company attaches great importance to anti-corruption, bribery prevention and fair competition, and to this end, we have set up relevant systems and procedures, constructed a rigorous risk internal control system, treated every reported case seriously, and ensured that all cases registered were investigated, so as to ensure the healthy development of the Company.

Business Ethics Management Measures

Trinasolar adheres to a "zero tolerance" attitude toward all corruption, bribery, and violations of business ethics. We keep improving the management system on internal anti-corruption and business ethics and commit to upholding the spirit of professionalism, fairness and integrity in all business dealings and cooperation to guarantee our integrity.

Trinasolar strictly abides by the laws and regulations related to business ethics in operating locations, and has formulated and strictly implemented management regulations such as the Anti-Corruption Management System Policy and the Code of Business Conduct and Ethics. To eliminate corruption in all business activities, we have issued policies such as the Management System on Receipt of Gifts and Benefits and the Management System on Gifts and Hospitality. The policies are designed to regulate the behavior of all employees (including business staff) in their daily work and in their dealings with suppliers, contractors, customers and third-party partners involving corruption, conflicts of interest, gifts and gratuities, and the use and protection of the Company's assets.

Based on strict adherence to moral standards, the Company extends anti-corruption to the supply chain. Through the Trinasolar's Supplier Code of Conduct, the Social Responsibility Management Code, and the supplier management system, Trinasolar conducts anti-corruption management and business ethics management for suppliers in three aspects: management requirements, assessment and supervision, and training and incentives.

In 2023, Trinasolar did not have any lawsuits or cases involving corruption or violation of business ethics.

Business Ethics Audit System

Trinasolar is committed to establishing a long-term and standardized audit supervision mechanism. We have set up an Audit Committee under the Board of Directors and established an Audit and Supervision Department. By establishing an internal audit and supervision system featuring coordination among audit and supervision, internal control, compliance and legal affairs, we aim to ensure the robustness and effectiveness of the Company's internal control and risk management system.

Following laws, regulations and regulatory requirements such as the China Internal Auditing Standards and the Basic Standard for Enterprise Internal Control, the Company has formulated and implemented internal policies such as the Internal Audit Standards and the Guest Auditor Management System. Annually, the Company assesses whether internal control compliance in the Company's key management activities, such as corporate organization management, strategic management, social responsibility management, asset management, capital activities, procurement business management, sales business management, financial reporting management, human resources management, and information system management, is operating effectively, and continuously improves management to avoid business risks.

During the Reporting Period

Trinasolar planned to conduct **26** business ethics audits throughout the year

the completion rate was **100%**

We continue to expand the audit scope and thoroughly apply digital audit tools to optimize the audit process and the closed-loop management mechanism for problems.

Case | Trinasolar Conducts Internal Audits on Overseas Subsidiaries and Implements the Rectification Programs

In 2023, the Company conducted internal audits on overseas subsidiaries, gave feedback on audit problems and required the subsidiaries to implement rectification programs. For example, as to the problem of rental expenses caused by the untimely disposal of idle assets at the Thailand facility, we required the Thailand facility to dispose of all idle assets by the end of December 2023 and make stock-out records for subsequent inspection; In regard to the lack of service procurement systems of the Australian subsidiary, we required the Australian subsidiary to establish locally-adapted service procurement systems and standards to clarify the business and approval processes from procurement demand to final payment.

Anti-Corruption and Business Ethics Training

Trinasolar has established an anti-corruption and business ethics training system covering all employees at home and abroad. Board members and full-time employee are all required to attend anti-corruption and business ethics training. We also develop additional training programs for key business units to regulate their business conduct.

Case | All Overseas Employees Study the Trinasolar Code of Business Conduct and Ethics for Employees

As an international enterprise, we attach importance to honest and friendly cooperation with overseas customers. In 2023, the Company issued the overseas version of the Trinasolar's Code of Business Conduct and Ethics for Employees. The Company organized all overseas employees to learn the core content of the system, consequences of violations, complaint channels, etc. to further strengthen overseas employees' understanding and knowledge on the code; We set up questions for the exam, and only those who get all the questions correct would be considered as having completed the learning. A total of 1,332 employees including our expatriates to subsidiaries in Southeast Asia, Europe, and the United States as well as overseas local employees all completed the training.

2023 Trinasolar Anti-corruption and Business Ethics Training Key Performance

Disclosure Item	Unit	2023
Coverage rate of anti-corruption and business ethics training for directors	%	100
Coverage rate of anti-corruption and business ethics training for employees	%	100
Coverage rate of anti-corruption and business ethics training for new employees	%	100

Anti-Unfair Competition and Anti-Money Laundering

Following the principle of "voluntary, equal, fair and honest", Trinasolar is committed to treating customers and competitors fairly, respecting their rights, and striving for business growth in a proactive manner. As required in the Anti-Corruption Management Policy, all employees of the Company should comply with the Anti-Unfair Competition Law of the People's Republic of China and other local laws and regulations, to conduct business in a compliant manner. During the Reporting Period, the Company did not have any lawsuits involving anti-unfair competition or anti-money laundering.

Reporting Mechanism

Trinasolar is devoted to protecting the legitimate interests of the Company, and supporting and protecting the reporting behavior of whistle-blowers. This is to ensure that violations are independently, objectively, and impartially investigated and dealt with, thereby safeguarding honesty, integrity, and fairness in the business environment. The Company has formulated the Company Reporting Rewards Management Measures, which releases reporting channels, the reporting acceptance process, measures to protect whistle-blowers and reporting rewards mechanism, etc. By doing so, employees, suppliers, customers and other stakeholders are encouraged to report possible misconduct of which they are aware.

Reporting Process

01 Telephone, email, letter, or face-to-face reporting can be adopted to give suggestions or make requests to the Company's Audit and Supervision Department

02 After receiving reporting information, the Audit and Supervision Department will set it as " confidential" and have it kept by designated employees, to keep strictly confidential about the reporter's identity

03 The Audit and Supervision Department will investigate violations and prepare an investigation report. It is then handed over to the HR department for processing.

As stipulated in the policies, any unit or individual is not allowed to obstruct or retaliate against reporters. Whistle-blowers can provide anonymous information for certain concerns. **In 2023, we received 25 effective reporting materials, with a 100% handling rate**.

Trinasolar's Main Reporting Channels

Report to the Company's leaders of audit and supervision department or business department
Official Online Reporting Complaint Platform website http://wb.Trinasolar.com:8090/RCPFM/Trinasolar/report
Reporting Complaints Email IA@Trinasolar.com
Complaint hotline 519-85176933

Information Security

Trinasolar highlights the information security and privacy protection of the Company and stakeholders. Therefore, we continue to improve the information security management system and increase the information security awareness and ability of all employees, to enhance information security protection. During the Reporting Period, Trinasolar obtained the ISO 27001: Information Security Management System Certification, and a three-star enterprise rating of industrial information security at the provincial level from the Industry and Information Technology Department of Jiangsu.

Information Security Management Mechanism

Keeping the legal red line and moral code in mind, the Company has formulated and strictly implemented a series of standardized documents such as the Information Security Management Regulation and the Information Secrecy Management Regulation, in accordance with the Cybersecurity Law of the People's Republic of China, the Data Security Law of the People's Republic of China, GDPR, and other local laws and regulations. We comprehensively manage information security in three major areas: security system, security technology and security operations.

In addition, we have set up a separate information security management section that covers all business-related processes on the Company's process management platform. Based on the section, we continuously update and improve a number of information security processes, including those related to risk assessment, compliance audit, vulnerability management, and monitoring and early warning.

As an enterprise with overseas operations, in 2023, Trinasolar established an information security assessment mechanism according to the Measures for the Security Assessment of Outbound Data Transfer. The Company also ensures the security of cross-border information and data transfer as required by the GDPR.

Information Security Risk Control

Trinasolar incorporates information security risk prevention and control into the regular management. For example, we set up a sound vulnerability management process, invite third-party institutions to carry out attack and defense drills for vulnerability scanning every year, and organize internal vulnerability scanning activities from time to time. Through these efforts, we aim to identify system information security risks for improvement.

Besides, the Company has established an emergency response mechanism for information security incidents to effectively reduce the Company's losses and impacts caused by information security accidents. In 2023, the Company issued the Data Leakage Emergency Response Plan. The plan specifies the handling procedure and responsibilities of related personnel. By doing so, we expect to improve the organization's ability and emergency response ability in case of data leakage, as well as the emergency working mechanism of information security incidents.

Information security emergency drills were organized, where tabletop exercises were conducted for emergency scenarios such as data leakage, phishing emails, and ransomware. In this way, Trinasolar can verify the effectiveness of various emergency plans in time, and improve employees' ability to analyze, make decisions on, and deal with information security emergencies.

Information Security Management Training

Trinasolar popularizes information security-related knowledge to employees through posters, journals and other channels. All employees are also required to participate in information security training to enhance their awareness and ability of information security and privacy protection.

As the Company develops, there is an increasing number of outsourced on-site employees. To effectively control data and information and avoid potential risks, in August 2023, the Company invited employees of the Information Security Department to conduct special training for outsourced on-site employees to prevent the Company's information security from being infringed.

Sustainable Development Awards

Awards	Awarders
2023 Forbes China Top 50 Innovative Enterprises	Forbes China
New Energy Science and Technology TOP10	Forbes China
2023 Forbes China ESG Innovative Enterprise	Forbes China
Partnership for Early Awareness of Sustainability-Disclosure Today (P4EAST)	ISSB
Decarbonisation Leader	European Union Chamber of Commerce
2023 Global Storage Providers & Integrators Bankability Top5	BNEF
Tier 1 PV module manufacturer	BNEF
2023 Bloomberg Green ESG 50	Bloomberg Green
2023 National Supply Chain Innovation and Application Demonstration Enterprise	Ministry of Commerce of the People's Republic of China, Ministry of Industry and Information Technology of the People's Republic of China and other 6 ministries
National Green Supply Chain Management Enterprise	Ministry of Industry and Information Technology of the People's Republic of China
TOP 500 Chinese Enterprises	China Enterprise Confederation, China Enterprise Directors Association
PV Module Tech Bankability Ratings AAA	PV ModuleTech
China's Top 30 ESG Excellence Practices of the Year	China ESG Forum

Indicator Index

Global Reporting Initiative (GRI) Indicator Index

Disclosure Issue/ Disclosure Item	Disclosure item	Chapter Index
The organization and its reporting practices		
2-1	Organizational details	About the Report
2-2	Entities included in the organization's sustainability reporting	About the Report
2-3	Reporting period, frequency and contact point	About the Report
2-5	External assurance	Independent Verfication Statement
Activities and workers		
2-6	Activities, value chain and other business relationships	About Trinasolar Supply Chain Management
2-7	Employees	Diversity and Inclusion
Governance		
2-9	Governance structure and composition	Corporate Governance and Compliant Operation
2-10	Nomination and selection of the highest governance body	Corporate Governance and Compliant Operation
2-11	Chair of the highest governance body	Corporate Governance and Compliant Operation
2-12	Role of the highest governance body in overseeing the management of impacts	Corporate Governance and Compliant Operation
2-13	Delegation of responsibility for managing impacts	Corporate Governance and Compliant Operation
2-14	Role of the highest governance body in sustainability reporting	Our Sustainability Management
2-15	Conflicts of interest	Corporate Governance and Compliant Operation
2-16	Communication of critical concerns	Our Sustainability Management Corporate Governance and Compliant Operation

Disclosure Issue/ Disclosure Item	Disclosure item	Chapter Index
2-17	Collective knowledge of the highest governance body	Our Sustainability Management Corporate Governance and Compliant Operation
2-19	Remuneration policies	Employee Rights and Benefits
2-20	Process to determine remuneration	Employee Rights and Benefits
Strategy, policies and practices		
2-22	Statement on sustainable development strategy	Our Sustainability Management
2-23	Policy commitments	Our Sustainability Management Climate and Carbon Emission Management Anti-Corruption and Business Ethics
2-24	Embedding policy commitments	Our Sustainability Management
2-25	Processes to remediate negative impacts	Our Sustainability Management
2-26	Mechanisms for seeking advice and raising concerns	Corporate Governance and Compliant Operation
2-27	Compliance with laws and regulations	No violations of laws or regulations
2-28	Membership associations	Industry Cooperation and Development
Stakeholder engagement		
2-29	Approach to stakeholder engagement	Our Sustainability Management
2-30	Collective bargaining agreements	Employee Rights and Benefits
3-1	Process to determine material topics	Our Sustainability Management
3-2	List of material topics	Our Sustainability Management
GRI 201 Economic Performance		
3-3	Management of material topics	Our Sustainability Achievements
201-1	Direct economic value generated and distributed	Our Sustainability Achievements
201-2	Financial implications and other risks and opportunities due to climate change	Climate and Carbon Emission Management
201-3	Defined benefit plan obligations and other retirement plans	Employee Rights and Benefits
GRI 204 Procurement Practices		
3-3	Management of material topics	Supply Chain Management
204-1	Proportion of spending on local suppliers	Supply Chain Management
GRI 205 Anti-corruption		
3-3	Management of material topics	Anti-Corruption and Business Ethics
205-1	Operations assessed for risks related to corruption	Anti-Corruption and Business Ethics
205-2	Communication and training about anti-corruption policies and procedures	Anti-Corruption and Business Ethics
205-3	Confirmed incidents of corruption and actions taken	There are no such cases occurred during the Reporting Period

Disclosure Issue/ Disclosure Item	Disclosure item	Chapter Index
GRI 302 Energy		
3-3	Management of material topics	Energy Use and Management
302-1	Energy consumption within the organization	Energy Use and Management
302-3	Energy intensity	Energy Use and Management
302-4	Reduction of energy consumption	Energy Use and Management
302-5	Reductions in energy requirements of products and services	Energy Use and Management
GRI 303 Water and Effluents		
3-3	Management of material topics	Water Stewardship Pollution Prevention and Control
303-1	Interactions with water as a shared resource	Water Stewardship Pollution Prevention and Control
303-2	Management of water discharge-related impacts	Pollution Prevention and Control
303-3	Water withdrawal	Water Stewardship
303-4	Water discharge	Pollution Prevention and Control
303-5	Water consumption	Water Stewardship
GRI 305 Emissions		
3-3	Management of material topics	Climate and Carbon Emission Management
305-1	Direct (Scope 1) GHG emissions	Climate and Carbon Emission Management
305-2	Energy indirect (Scope 2) GHG emissions	Climate and Carbon Emission Management
305-3	Other indirect (Scope 3) GHG emissions	Climate and Carbon Emission Management
305-4	GHG emissions intensity	Climate and Carbon Emission Management
305-5	Reduction of GHG emissions	Climate and Carbon Emission Management
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Pollution Prevention and Control
GRI 306 Waste		
3-3	Management of material topics	Pollution Prevention and Control
306-1	Waste generation and significant waste-related impacts	Pollution Prevention and Control
306-2	Management of significant waste-related impacts	Pollution Prevention and Control
306-3	Waste generated	Pollution Prevention and Control
306-4	Waste diverted from disposal	Pollution Prevention and Control
306-5	Waste directed to disposal	Pollution Prevention and Control
GRI 308 Supplier Environmental Assessment		
3-3	Management of material topics	Supply Chain Management
308-1	New suppliers that were screened using environmental criteria	Supply Chain Management

Disclosure Issue/ Disclosure Item	Disclosure item	Chapter Index
308-2	Negative environmental impacts in the supply chain and actions taken	Supply Chain Management
GRI 401 Employment		
3-3	Management of material topics	Employee Rights and Benefits
401-1	New employee hires and employee turnover	Diversity and Inclusion
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee Rights and Benefits
401-3	Parental leave	Employee Rights and Benefits
GRI 402 Labor/Management Relations		
3-3	Management of material topics	Employee Rights and Benefits
GRI 403 Occupational Health and Safety		
3-3	Management of material topics	Occupational Health and Safety
403-1	Occupational health and safety management system	Occupational Health and Safety
403-2	Hazard identification, risk assessment, and incident investigation	Occupational Health and Safety
403-3	Occupational health services	Occupational Health and Safety
403-4	Worker participation, consultation, and communication on occupational health and safety	Occupational Health and Safety
403-5	Worker training on occupational health and safety	Occupational Health and Safety
403-6	Promotion of worker health	Occupational Health and Safety
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational Health and Safety
403-8	Workers covered by an occupational health and safety management system	Occupational Health and Safety
403-9	Work-related injuries	Occupational Health and Safety
403-10	Work-related ill health	Occupational Health and Safety
GRI 404 Training and Education		
3-3	Management of material topics	Employee Training and Development
404-1	Average hours of training per year per employee	Employee Training and Development
404-2	Programs for upgrading employee skills and transition assistance	Employee Training and Development
404-3	Percentage of employees receiving regular performance and career development reviews	Employee Training and Development
GRI 406 Non-discrimination		
3-3	Management of material topics	Diversity and Inclusion
406-1	Incidents of discrimination and corrective actions taken	Diversity and Inclusion

Disclosure Issue/ Disclosure Item	Disclosure item	Chapter Index
GRI 408 Child Labor		
3-3	Management of material topics	Employee Rights and Benefits
408-1	Operations and suppliers at significant risk for incidents of child labor	Employee Rights and Benefits
GRI 409 Forced or Compulsory Labor		
3-3	Management of material topics	Employee Rights and Benefits
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Employee Rights and Benefits
GRI 414 Supplier Social Assessment		
3-3	Management of material topics	Supply Chain Management
414-1	New suppliers that were screened using social criteria	Supply Chain Management
414-2	Negative social impacts in the supply chain and actions taken	There are no such cases occurred during the Reporting Period
GRI 416 Customer Health and Safety		
3-3	Management of material topics	Product and Service Responsibility
416-1	Assessment of the health and safety impacts of product and service categories	Product and Service Responsibility
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	There are no such cases occurred during the Reporting Period
GRI 417 Marketing and Labeling		
3-3	Management of material topics	Product and Service Responsibility
417-1	Requirements for product and service information and labeling	Product and Service Responsibility
417-2	Incidents of non-compliance concerning product and service information and labeling	There are no such cases occurred during the Reporting Period
417-3	Incidents of non-compliance concerning marketing communications	There are no such cases occurred during the Reporting Period
GRI 418 Customer Privacy		
3-3	Management of material topics	Product and Service Responsibility
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	There are no such cases occurred during the Reporting Period

Independent Verification Statement

Independent Verification Statement

To the management and stakeholders of Trina Solar,

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch (hereinafter referred to as "TÜV SÜD") has been engaged by Trina Solar Co., Ltd. (hereinafter referred to as "Trina Solar" or "the Company") to perform an independent third-party verification on *Trina Solar Co., Ltd. 2023 Sustainability Report* (hereinafter referred to as "the Report"). During this verification, TÜV SÜD's verification team strictly abided by the contract signed with Trina Solar and provided verification regarding the Report in accordance with the provisions agreed by both parties and within the authorized scope stipulated in the contract.

This Independent Verification Statement is based on the data and information collected by Trina Solar and provided to TÜV SÜD. The scope of verification is limited to the given information. Trina Solar shall be held accountable for authenticity and completeness of the provided data and information.

Scope of Verification

Time frame of this verification:

- The Report contains the data disclosed by Trina Solar during the reporting period from 1st January 2023 to 31st December 2023, including environmental, social, and governance information and data, methods for management of material issues, actions/measures and the Company's sustainability performance during the reporting period.

Physical boundary of this verification:

- The on-site verification sampling took place at below listed locations:
  Trina Solar's headquarters located at No. 2 Tianhe Road, Trina PV Industrial Park, Xinbei District, Changzhou City, Jiangsu Province, and Yancheng Trina Solar Guoneng Science & Technology Company Limited located at No.101 Wutaishan Road, Yancheng Economic & Technological Development Zone, Yancheng City, Jiangsu Province.

Scope of data and information for the verification:

- The scope of verification is limited to the data and information of Trina Solar and all companies under its operational control covered by the Report.

The following information and data are beyond the scope of this verification:

- Any information and contents beyond the reporting period of this Report; and
- The data and information of Trina Solar's suppliers, partners and other third parties; and
- The financial data and information disclosed in this Report that have been audited by an independent third party are not verified again herein.

Limitations

- The verification process is conducted in the above scope and places. Sampling and verification are adopted for the data and information in the Report by TÜV SÜD, and only the stakeholders within the Company are interviewed; and
- The Company's standpoint, opinions, forward-looking statements and predictive information as well as the historical data and information before 1st January 2023 are beyond the scope of this verification.

Basis for the Verification

This verification process was conducted by TÜV SÜD's expert team with extensive experience in the environmental, social, and governance and other relevant areas and drew the conclusions thereof. The verification conforms to the following standards:

ID: 252713 Revision: 0 - released Effective: 25 Aug 2023

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Independent Verification Statement

- *AA1000AS v3, Type 1 Engagement and Moderate Level of Assurance*
- *TÜV SÜD Procedure of Verification on Sustainability Report*

In order to perform adequate verification in accordance with the contract and provide limited verification for the conclusions, the verification team conducted the following activities:

- Preliminary investigation of the relevant information before the verification;
- Confirmation of the presence of the topics with high level of materiality and performance in the Report;
- On-site review of all supporting documents, data and other information provided by Trina Solar; sampling verification on key performance information;
- Special interview with the representative of Trina Solar's management; interviews with the employees related to collection, compilation and reporting of the disclosed information; and
- Other procedures deemed necessary by the verification team.

Verification Conclusions

According to the verification, we believe that the data and information presented in Trina Solar's report are objective, factual and reliable, without systematic problems, and can be used by stakeholders.

The verification team has drawn the following conclusions on this Report:

Inclusivity	Trina Solar has fully identified the organisation's internal and external stakeholders, including customers, shareholders/investors, government and regulatory bodies, employees, suppliers and partners, community and non-government organisations, and the media, and has set up a stakeholder communication mechanism in order to collect the real demands of stakeholders on a regular basis.
Materiality	Trina Solar has established a process for prioritising material topics, identified and prioritised sustainability issues that are highly relevant to the industry, disclosed targets and performance data in the company's sustainability management and operations, and the content of the report is material.
Responsiveness	Focusing on issues of concern to stakeholders, Trina Solar clearly disclosed its management methods and performance on major issues in the areas of carbon emission management, environmental compliance, employee rights and benefits, employee training and development, and supply chain management, and established communication methods to adequately respond to the demands and expectations of stakeholders.
Impact	Trina Solar has established an ESG management system and governance structure to clarify ESG-related job responsibilities at all levels to ensure its smooth operation. Through continuous tracking of annual progress and board deliberations, Trina Solar monitors, measures and be accountable for impacting the broader ecosystem.

Recommendations on Continuous Improvement

- The management improvement recommendations have been communicated to Trina Solar's management for reference during the verification process.

Statement on Independence and Verification Capability

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Independent Verification Statement

TÜV SÜD is a trusted partner of choice for safety, security and sustainability solutions. It specialises in testing, certification, auditing and advisory services. Since 1866, TÜV SÜD has remained committed to its purpose of enabling progress by protecting people, the environment and assets from technology-related risks. Today, TÜV SÜD is present in over 1,000 locations worldwide with its headquarters in Munich, Germany. TÜV SÜD has been committed to sustainable development and actively promotes environmental protection related projects. Over the years, TÜV SÜD has been actively expanding its performance in energy management, renewable resources, and electric automobiles, etc., helping its customers meet sustainable development needs.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shanghai Branch is one of TÜV SÜD's global branches and has an expert team whose members have professional background and rich industrial experiences.

TÜV SÜD and Trina Solar are two entities independent of each other and both TÜV SÜD and Trina Solar and their branches or stakeholders have no conflict of interest. No member of the verification team has business relationship with the Company. The verification is completely neutral.

Signature:

On Behalf of TÜV SÜD Certification and Testing (China) Co., Ltd.

AA1000
Licensed Report
000-437/V3-LLK4J

TÜV SÜD Sustainability Authorized Signatory Officer

Mar. 22nd, 2024

Changzhou, China

Note: In case of any inconsistency or discrepancy, the simplified Chinese version "Independent Verification Statement CN" of this verification statement shall prevail, while the English translation is used for reference only.

ID: 252713 Revision: 0 - released Effective: 25 Aug 2023

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