
Trinasolar
2025
Taskforce on
Nature-related
Financial
Disclosures Report

Contents

About This Report 3

Message from Chairman 5

About Trinasolar 7

Highlight Story I: Trinasolar Accelerates Net-Zero Journey with SBTi-Validated Targets 9

Highlight Story II: Safeguarding Nature with Smart Energy 11

Appendix: TNFD Reporting Index 63

01 Governance 13

Policies and Commitments 15

Governance Structure 16

Directors and Senior Executives Engagement 17

02 Risk and Impact Management 19

Nature-related Management System 21

Analysis Method for Nature-related Dependencies, Impacts, Risks and Opportunities 24

03 Strategy 35

Nature-related Risks and Opportunities 37

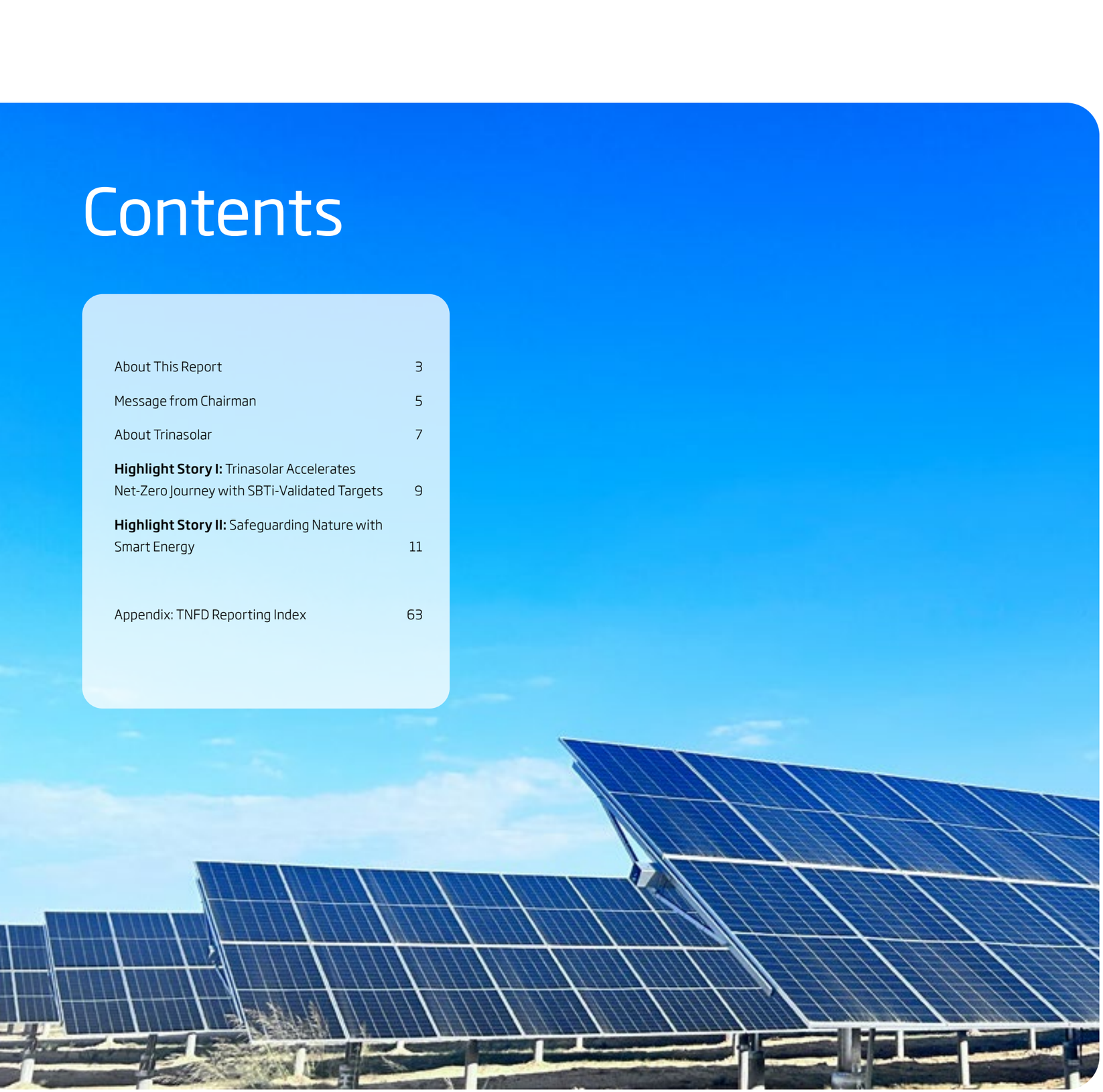
Nature-friendly Strategies 45

Ecological Protection and Restoration 51

04 Metrics and Targets 55

Nature-related Targets 57

Nature-related Metrics 59



About This Report

Report Overview

Trina Solar Co., Ltd. (hereinafter "Trinasolar")'s 2025 Taskforce on Nature-related Financial Disclosures Report (the Report) sets out an approach to nature-related matters during the reporting year. The Report addresses four sections, including governance, risk and impact management, strategy, and metrics and targets. Company operations can both rely on ecosystem functions and place pressures on them through land use, water use, resource inputs, and other interactions.

In the Report, the term "nature" is understood here as the natural world, emphasizing the diversity of living organisms (including people) and their interactions among themselves and with their environment, including four realms: land, ocean, freshwater, and atmosphere.

Reporting Scope

The organizational scope of this report includes Trinasolar's operations and subsidiaries within the People's Republic of China, as well as its overseas operational manufacturing sites as of the end of 2025. The assessment scope covers all operating manufacturing bases and self-owned power plants across Trinasolar's business segments, including monocrystalline silicon wafers, solar cells, modules, photovoltaic (PV) power plants, solar mounting systems, energy storage cells and systems. The intended reporting period for the Report is January 1 to December 31, 2025. To ensure timeliness and continuity of disclosure, certain information incorporates data from previous years or extends through October 2026 where appropriate. Information relating to a date or period outside 2025, if included, will be identified with its applicable date or period.

Reporting References

While we acknowledge the recent publication of TNFD Version 2.0 and LEAP Version 2.0, the core assessment for this reporting cycle was conducted prior to their release. Therefore, the Report aligns with the Recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) Version 1.0 (hereinafter "TNFD Recommendations"), released in September 2023. The assessment follows the TNFD Guidance on identification and assessment of nature-related issues: The LEAP approach Version 1.1 (hereinafter "LEAP Approach"), applying the four-phased LEAP methodology: Locate, Evaluate, Assess, and Prepare. In our commitment to continuous improvement, future disclosures will be updated to align with the TNFD 2.0 and LEAP 2.0 frameworks.

Data Sources

Data and information sources for this report include Trinasolar's internal statistics, publicly available reports and publications, as well as third-party research or interviews, government authorities, and professional institutions. The Report contains no false entries, misleading representations or material omissions. Monetary amounts are expressed in renminbi (RMB), unless otherwise specified.

Designation Clarification

For the purposes of this Report, "Trina Solar Co., Ltd." is referred to as "Trinasolar" or "the Company". References to "we" are interpreted within the reporting boundary specified in the Reporting Scope section. Where information relates to a specific entity, site, business activity, or assessment boundary, this is identified separately.

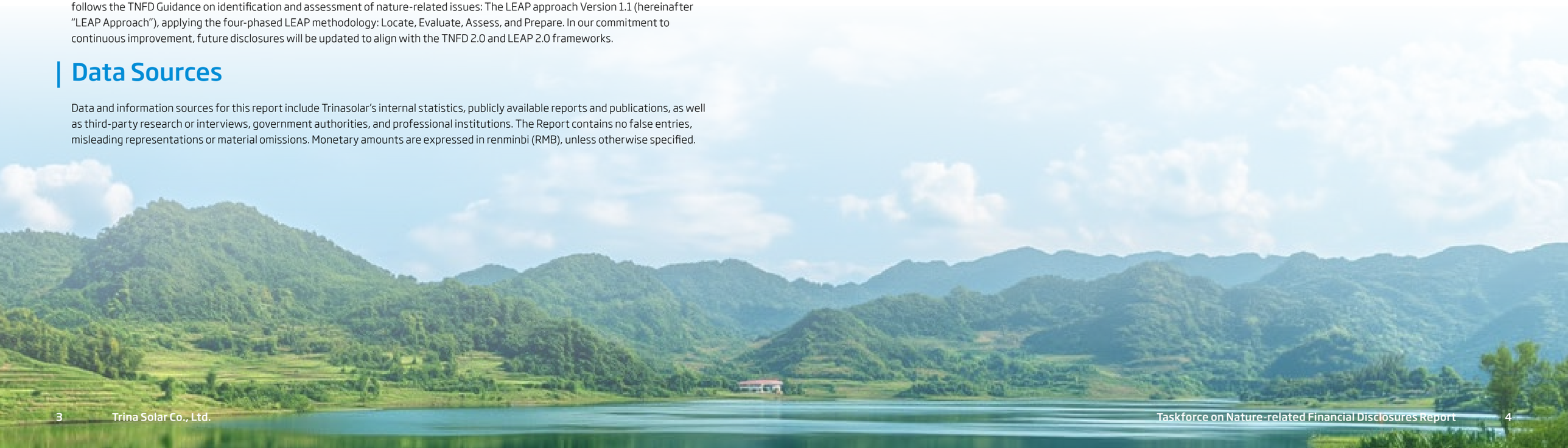
Report Access

The Report is available for download at our official website. The Report is published in both Simplified Chinese and English. The English version shall prevail in the event of any discrepancies between the two versions.

Limitations and Disclaimer

This document marks Trinasolar's inaugural comprehensive review of its reliance on and impact upon natural ecosystems, alongside associated nature-related risks, opportunities, and the financial implications of physical risks. All evaluations, projections, and monetary estimates herein reflect the Company's current assumptions, industry insights, and regulatory awareness. Given the inherent constraints of third-party analytical platforms, geospatial data accuracy, and database reliability, these findings carry natural limitations. They are not intended to forecast future outcomes with certainty or account for unexpected developments. The financial estimates provided are directional only, derived from historical data, established models, and executive judgment, and should not be interpreted as definitive predictions of future financial performance or losses. Trinasolar expressly disclaims any liability for decisions or actions taken in reliance on this report.

All geographic labels, boundaries, and regional designations are provided strictly for informational reference and do not represent or imply any official stance by Trinasolar concerning national sovereignty, territorial disputes, or the political status of any country, territory, or region.



Message from the Chairman



Mr. Gao Jifan

Chairman of
Trinasolar

Natural resources are the foundation of human survival and development, as well as the cornerstone of long-term corporate value. Guided by Trinasolar's sustainability vision–Solar Energy for All–Trinasolar has fully integrated biodiversity conservation into its sustainability strategy, promoting the deep integration of clean energy supply and ecosystem stewardship.

Guided by the "SOLAR" sustainability philosophy, we continue to refine our ESG governance structure. With the Board of Directors and its Strategy and Sustainability Committee serving as the highest decision-making bodies, we ensure that sustainability requirements are implemented at every level of the organization. In a significant milestone for our climate action, Trinasolar's greenhouse gas emission reduction targets have been officially validated by the Science Based Targets initiative (SBTi), endorsing our commitment to significantly reduce Scope 1, 2, and 3 emissions and achieve net-zero emissions across the entire value chain by 2050. In 2025, we revised and upgraded our Biodiversity Conservation Policy, further clarifying the management structure and operational procedures, and integrating biodiversity assessment into the Company's risk management system. The policy commitments cover our own operations, supply chain, and partners, embedding nature conservation requirements into business management and operations.

We systematically identify and assess the impacts, dependencies, risks, and opportunities related to nature across our business activities, drawing on frameworks and tools such as the Taskforce on Nature-related Financial Disclosures (TNFD), the LEAP methodology, and the ENCORE database, thereby providing a scientific basis for our biodiversity conservation strategies. Following the four-tiered action principles of avoidance, minimization, restoration, and offset, we embed biodiversity conservation requirements into our environmental impact assessment system. Through lifecycle analysis, evaluation, and continuous monitoring, we proactively identify and minimize potential ecological disturbances.

In response to the global challenges of ecosystem degradation and biodiversity loss, Trinasolar is advancing the deep integration of clean energy technologies and ecological conservation. Our vision and actions are fully aligned with the Kunming-Montreal Global Biodiversity Framework (GBF), contributing to the global mission of halting and reversing biodiversity loss. By leveraging our integrated solar-and-storage capabilities and scenario-adaptive smart energy solutions, we are committed to building an innovative "Smart Energy & Ecosystem" model tailored to diverse ecological contexts–from wetlands and plateaus to arid deserts. We uphold the principles of "prevention first and systematic protection" throughout the entire project lifecycle, exploring pathways that harmonize clean energy generation with ecosystem restoration and fulfilling our solemn commitment to the global community of life.

Looking ahead, we will continue to protect forest resources with the goal of achieving zero deforestation, and encourage our suppliers and partners to make corresponding commitments. Through continuous stewardship, we strive to avoid net loss to surrounding biodiversity and aim to achieve a net positive impact. Together with partners across the industrial chain, we will advance the global green and low-carbon transition and sustainable development, contributing to Trinasolar's wisdom and strength with an ecosystem-first mindset.

About Trinasolar

About Us

Founded in 1997, Trina Solar Co., Ltd. (stock symbol: Trinasolar; stock code: 688599) is a global leader in smart PV and energy storage solutions. Guided by customer needs, Trinasolar delivers tailored, scenario-based smart energy solutions across diversified and complex application environments:

PV Products

R&D, production and sales of PV modules;

Energy Storage

A wide range of energy storage solutions for utility-scale power plants, commercial and industrial applications, and residential use;

System Solutions

Including trackers, distributed generation systems, centralized power plants, and other related businesses;

Digital Energy Services

Comprising new energy O&M services, on/off-grid microgrids, solar-storage-charging integration, solar-storage-load coordination, virtual power plants, electricity trading, and other services.

Mission

Solar Energy for All

Vision

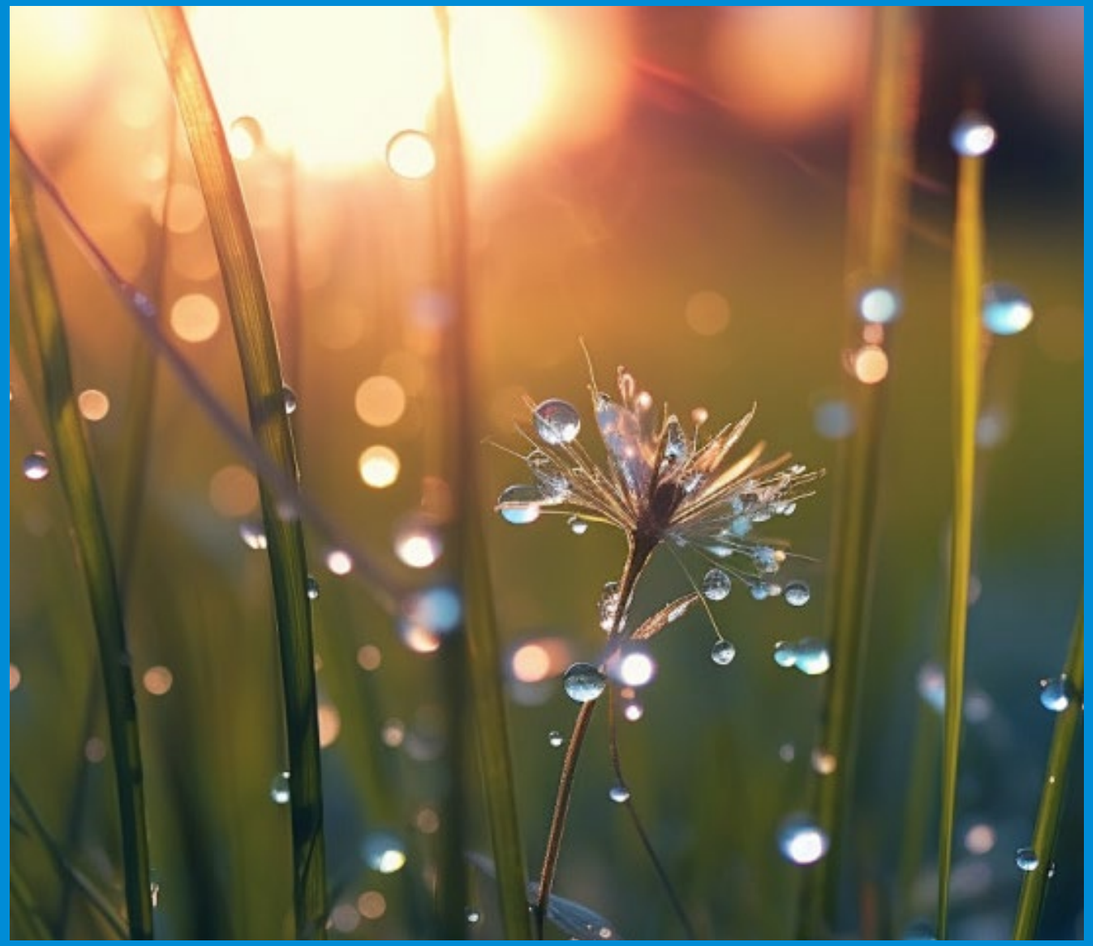
Leading the Way in Smart PV and Energy Storage Solutions

Core Values

Focus on the Customers, Persist in Open Innovation, Persevere through Dedication and Hard Work, Strive for Excellence, Share the Responsibility, Create and Share Value Together.



This image is consistent with the Company's operating status as of the end of October 2026.



Highlight Story I:

Trinasolar Accelerates Net-Zero Journey with SBTi-Validated Targets

As the urgency of climate change intensifies, setting robust international carbon reduction targets is critical to limiting global warming and driving the worldwide transition toward clean energy. For modern enterprises, decarbonization is no longer just a compliance requirement, but a strategic imperative to build long-term resilience and ensure sustainable growth. As a global leader in smart energy solutions, Trinasolar plays a pivotal role in this transformation, acting as both a pioneer and a catalyst that empowers industries worldwide to achieve a sustainable future.

Demonstrating this unwavering commitment, Trinasolar has reached a significant milestone in its nature-positive journey, receiving official validation from the Science Based Targets initiative (SBTi) for its ambitious greenhouse gas (GHG) reduction goals.

Using 2025 as a baseline, Trinasolar commits to reducing Scope 1 and 2 emissions by 65.9% by 2035, scaling to a 90% reduction by 2050. Concurrently, Scope 3 emissions per unit of product will drop by 66.3% by 2035 and 97% by 2050, culminating in net-zero emissions across the entire value chain.

Near-Term	Long-Term	Net-Zero
Trina Solar Co., Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 65.9% by 2035 from a 2025 base year. Trina Solar Co., Ltd. also commits to reduce scope 3 GHG emissions from purchased goods and services 66.3% per unit of product within the same timeframe.	Trina Solar Co., Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 90.0% by 2050 from a 2025 base year. Trina Solar Co., Ltd. also commits to reduce scope 3 GHG emissions from purchased goods and services and fuel- and energy-related activities 97.0% per unit of product within the same timeframe.	Trina Solar Co., Ltd. commits to achieve net-zero greenhouse gas emissions across the value chain by 2050.

To realize this vision, Trinasolar is executing a comprehensive climate management policy focused on three strategic pillars:

Energy Optimization

The Company is transforming its energy structure by installing rooftop solar at global manufacturing bases and advancing source-grid-load-storage projects. Trinasolar also mandates strict energy-saving assessments for all fixed-asset investments and implements advanced efficiency technologies, including waste heat recovery.

Zero-Carbon Ecosystem

Trinasolar is pioneering a holistic "Zero-Carbon System" spanning operations, the value chain, and products. Key initiatives include building zero-carbon industrial parks and factories, securing Environmental Product Declarations (EPDs), and actively driving primary suppliers to participate in the zero-carbon transition. The organizational greenhouse gas emissions data is strictly audited by third parties in accordance with ISO 14064 standards.

Enhanced Climate Resilience

The Company embeds climate considerations into facility site selection, tracks global climate policies, and maintains robust emergency response plans to safeguard operations against climate-related risks.

By treating green transformation as a catalyst for sustainable momentum, Trinasolar is reinforcing its long-term competitiveness and leading the global photovoltaic industry toward a resilient, net-zero future.



Highlight Story II:

Safeguarding Nature with Smart Energy

As a global leader in PV products, energy storage, system solutions and digital energy services, Trinasolar is committed to its mission of "Solar Energy for All" and fostering harmony between humanity and nature. By deeply integrating the "SOLAR" sustainable development concept into its corporate DNA, Trinasolar is driving the global transition to clean energy while actively protecting biodiversity through innovative practices.

Nature-Inclusive Design | Protecting the Migratory Bird Habitat at Chongming Dongtan

At the Chongming Dongtan National Nature Reserve for Birds in Shanghai, Trinasolar has pioneered a path for solar technology and wetland ecology to coexist harmoniously by building a smart microgrid green energy station. Operating off-grid for "self-generation and self-consumption," the project provides clean electricity for the reserve's patrol vehicles, enabling zero-carbon patrols. To minimize the impact on the flight paths of migratory birds, the project features a customized low-tilt solar panel design. This innovation provides green energy while safeguarding the wetland ecosystem and the tranquil home of the birds.

PV + Ecological Restoration | The "Grazing and Solar" Miracle in the Gobi Desert of Talatan

At Talatan, Qinghai, Trinasolar supplies Vertex modules to a 1,000 MWp solar-storage project developed with CNNC Huineng. Raised mounting, straw checkerboards and ecological fencing stabilize sand across some 24,000 mu, while panel shade and cleaning water reduce evaporation and support vegetation recovery. Herder cooperatives graze sheep between the arrays under agreement with the operator, forming a "power generation above, grass below, grazing between the panels" model that pairs land restoration with pastoral livelihoods.



Towards a "Nature-Positive" Future

As of the end of 2025, Trinasolar's cumulative global module shipments exceeded 327 GW, generating carbon reduction benefits equivalent to planting 24.1 billion trees. From wetlands to the Gobi Desert, Trinasolar is taking concrete actions to cultivate a green foundation. Moving forward, Trinasolar will continue to collaborate with global partners to protect ecosystems with smart energy, jointly building a "nature-positive" zero-carbon future.

01 Governance

Policies and Commitments

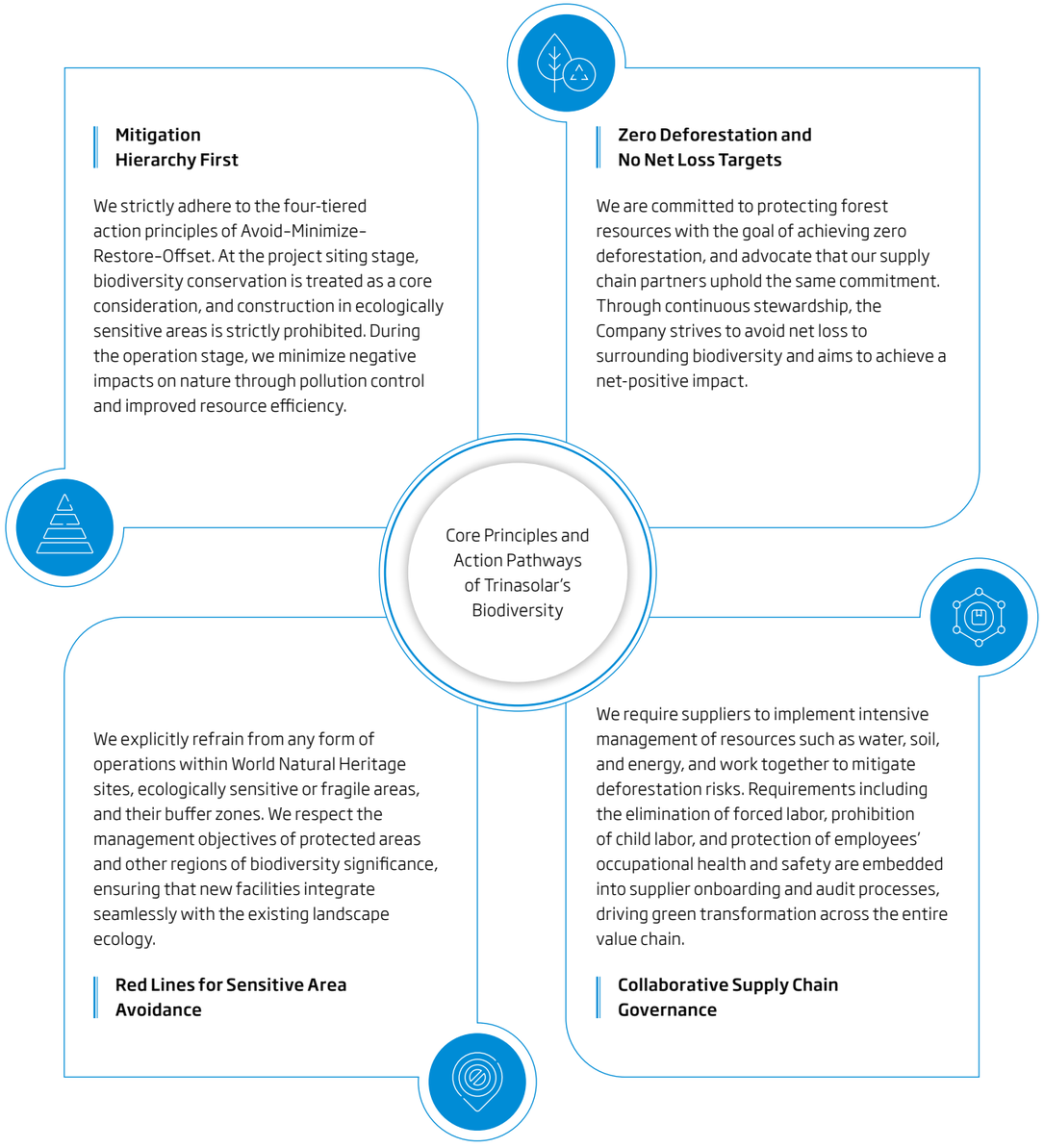
Governance Structure

Directors and Senior Executives Engagement

As ecological imbalance and biodiversity loss become global challenges, Trinasolar responds to the call of our time with strategic-level action. We have elevated natural resource protection to a core corporate issue and, through our ESG governance system, embedded ecological protection into every aspect of sustainable operations. We strictly follow international conventions including the *Convention on Biological Diversity*, the *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, and the *Convention on Wetlands of International Importance especially as Waterfowl Habitat*, as well as national policy requirements such as the *Opinions on Further Strengthening Biodiversity Conservation*. We actively support the goals and targets of the Kunming-Montreal Global Biodiversity Framework (GBF). While accelerating access to clean energy, we remain firmly committed to fulfilling our ecological and environmental responsibilities and to building a better future in which people and nature live in harmony.

Policies and Commitments

Trinasolar has officially released its *Biodiversity Conservation Policy*, which was reviewed and approved by the Company's Board members and senior management. The policy establishes a governance paradigm centered on natural capital. It aims to scientifically identify and quantify the dependencies and impacts of our global operations on biodiversity through full-life-cycle mapping. At the same time, it leverages forward-looking risk early-warning mechanisms and nature-based solutions to mitigate negative impacts and fulfill our responsibility to protect ecosystems.



Governance Structure

Trinasolar continues to refine its ESG governance structure and sustainability management system, coordinating the response to nature-related dependencies, impacts, risks, and opportunities. At the same time, it fully integrates nature-related issues–such as biodiversity conservation–into the Company's strategy and governance system, forming a systematic and comprehensive closed-loop approach to nature management.

Board of Directors

As the ultimate governing body for ESG matters, the Board provides overall guidance and oversight of ESG and sustainability management. It is responsible for supervising the Company's nature-related dependencies, impacts, risks, and opportunities. The Board reviews nature-related matters at least once a year, including relevant strategies and ensuring that strategic objectives are closely aligned with global cutting-edge conservation priorities.

Strategy and Sustainability Committee

Serving as the highest decision-making body for ESG management, the Committee reports to the Board of Directors. Its primary responsibilities include reviewing natural capital conservation strategies, biodiversity action plans, and major policies; assessing nature-related risks and opportunities–including dependencies on and impacts to ecosystems–and providing professional recommendations to the Board; and overseeing the implementation of nature-positive initiatives, resource allocation, and progress outcomes.

ESG Management Committee

Role and Responsibilities

As the management body for ESG matters, the Committee is responsible for organizing and advancing ESG management, deliberating on and deciding key ESG control functions, strategy implementation, and performance evaluations. It coordinates, guides, and supervises major ESG issues and topic-level decisions, and monitors the operation of the ESG management system.

Cross-functional Collaboration

It engages EHS, R&D, procurement, manufacturing, sales, and other departments to jointly advance nature conservation. The Committee reports thematically to the Company's Board members and senior management, at least once a year, tracks policy trends, identifies and evaluates nature-related risks, and cascades strategic objectives into concrete actions.

Directors and Senior Executives Engagement

The Board of Directors serves as the highest governing body for nature and sustainability-related governance. It is primarily responsible for formulating natural capital conservation strategies, reviewing major biodiversity and ecosystem issues, managing investor relations, and overseeing nature-related risk management, thereby ensuring the effective operation of the governance system.

Regular Deliberation

The Board fully incorporates professional advice and systematically integrates nature dependency and impact assessments as well as biodiversity conservation factors into strategic planning, business plan development, and enterprise-wide risk management processes. Nature-related matters have been included on the agendas of the Board and the Strategy and Sustainability Committee, with relevant discussions held at least annually.

Forward-looking Guidance

By establishing a long-term value orientation, the Board actively promotes the Company's deep respect for and stewardship of natural ecosystems, ensuring that the Company consistently fulfills its biodiversity commitments throughout its development.

Disclosure Approval

The Board approves disclosure items such as the Company's Sustainability Report and TNFD Report, ensuring the truthfulness, accuracy, and completeness of information disclosure and enhancing transparency.

Compensation Linkage

The Company incorporates nature performance indicators–such as biodiversity conservation outcomes and ecological restoration investments–into the annual performance appraisal of senior management, linking them to incentives. The variable compensation of senior executives, including the CEO, is tied to the achievement of business performance indicators (e.g., return on equity, operating revenue, and net profit) as well as their individual contributions to sustainability performance, including nature risk management and compliant operations.

Targeted Training

Multi-level, specialized training on nature and ESG is provided to directors, key managers responsible for addressing nature-related risks, dedicated ecological protection personnel at production bases, and supply chain partners. This comprehensively enhances capabilities in biodiversity conservation and natural capital management, and strengthens the foundation for nature governance across the entire value chain.

Case Study **Participating in International Climate Dialogue and Sharing Integrated Practices of Photovoltaics and Ecological Restoration**

On July 11, 2025, Ms. Wu Xiao, Vice President of Trinasolar and Head of Risk Control and ESG Management, was invited to attend the Climate Just Transition Roundtable hosted by the UN Global Compact (UNGC) in Shanghai. She presented the Company's practices in supporting community development through technical assistance, collaborating with universities, and integrating photovoltaic applications with ecological restoration. She advocated embedding just transition into corporate strategy and operations, and incorporating community empowerment into ESG metrics, so as to translate related initiatives into actionable, measurable, and trackable outcomes. At the event, Trinasolar officially joined the Global Solar Sustainability Alliance (GSSA). The alliance promotes actions covering pollution reduction, resource conservation, biodiversity protection, and responsible sourcing, providing a collaborative platform for PV companies to engage in sustainable development cooperation.



02

Risk and Impact Management

Nature-related Management System

Analysis Method for Nature-related Dependencies, Impacts, Risks and Opportunities

Amid the global focus on biodiversity conservation and the transition toward a nature-positive economy, Trinasolar actively monitors potential risks and opportunities arising from nature-related impacts and dependencies. Trinasolar references the Taskforce on Nature-related Financial Disclosures (TNFD) framework to systematically disclose information on nature-related risks and opportunities. In preparation for alignment with emerging global nature and biodiversity standards, Trinasolar continues to enhance its methodologies and adjust its disclosure content, following relevant guidelines to enable formal integration into the sustainability-related financial information section of future annual reports. Trinasolar integrates nature scenario data, site-specific ecological characteristics, and ecosystem baseline data to scientifically quantify and assess the operational impacts of nature-related risks. Following the TNFD LEAP (Locate, Evaluate, Assess, Prepare) approach, relevant responsible divisions conduct comprehensive analyses of risks and opportunities based on policies and regulations (including current and emerging regulations), market and technology changes, reputation, legal, and physical ecosystem degradation, in order to develop targeted mitigation, restoration, and adaptation strategies. By linking these efforts to the Company's Sustainability Strategy and Blueprint, Trinasolar regularly reviews the achievement of various nature-related indicators to ensure effective ecosystem management.

Nature-related Management System

Trinasolar manages nature-related dependencies and impacts through its environmental management systems and Biodiversity Conservation Policy. In 2025, the Company revised the policy to clarify responsibilities and implementation requirements, incorporating biodiversity dependencies and impacts into risk evaluations and integrating biodiversity risk assessment into its Enterprise Risk Management (ERM) system. These arrangements connect biodiversity protection with the management of water, energy, pollution, waste and resource use across operations and the value chain.

Management of Nature-related Risks and Opportunities

Each production base identifies and evaluates its environmental factors annually and prepares a list of key environmental factors. Group headquarters consolidates these findings into an environmental risk control list, defining control measures and handling methods for each key factor. Biodiversity protection is also embedded in environmental impact assessment during project planning, construction and operation, with assessment and monitoring of impacts on air, water, soil, noise and ecosystems throughout the project lifecycle.

The Company references the TNFD framework, the LEAP approach and the ENCORE database to identify and assess nature-related dependencies, impacts, risks and opportunities, and uses Biodiversity Impact Assessment (BIA) to analyse the relationship between its bases and ecosystems. The biodiversity risk assessment scope includes the Company's operational sites, areas within 50 km of those sites, and upstream and downstream activities. Ecological screening considers threatened-species habitats, national parks, nature reserves, World Heritage sites and other areas of biodiversity importance.

Management of Nature-related Impact Drivers

In 2025, Trinasolar revised its Prevention and Control Management Procedure of Water Pollution, Atmospheric Pollution Prevention Management Procedure, Waste Management Procedure and Noise Management Procedure. These procedures integrate local regulatory requirements and operating conditions within a management framework for global manufacturing bases. Controls cover source reduction, process management, treatment, monitoring and compliant disposal.

The Chemical Management Procedure covers procurement, transportation, storage, use and disposal. New hazardous chemicals undergo environmental, health and safety assessment before procurement; storage is segregated and supported by fire, explosion and leakage prevention measures. Waste chemicals are collected in dedicated leak-proof containers and transferred to qualified disposal providers, with records maintained for traceability. Wastewater controls include stormwater and wastewater segregation, pollution-source inventories and routine monitoring, while qualified third parties verify waste gas treatment effectiveness and emission concentrations.

Management of Dependencies on Nature

Water stewardship combines resource availability assessment with water efficiency and pollution prevention. The Board's Strategy and Sustainability Committee is the highest decision-making body for water management; the ESG Management Committee coordinates implementation and performance oversight; and business units and production bases implement specific measures. Water-saving targets are incorporated into production bases' annual environmental performance evaluations. Water metering, monitoring, cooling-water circulation and reclaimed-water reuse support the management of operational water demand.

In 2025, Trinasolar assessed water stress at 35 domestic and overseas production bases using the WRI Aqueduct Water Risk Atlas. Two bases were classified as extremely high water stress, 11 as high, 19 as medium-high and three as low. Specific response plans for the Deyang Polysilicon and Deyang New Materials bases focus on optimizing water sourcing and improving water efficiency. Energy dependencies are managed through the Energy Resource Management Procedure, Energy Metering Management Procedure and Energy Review Management Procedure, together with efficiency improvements and renewable energy use.

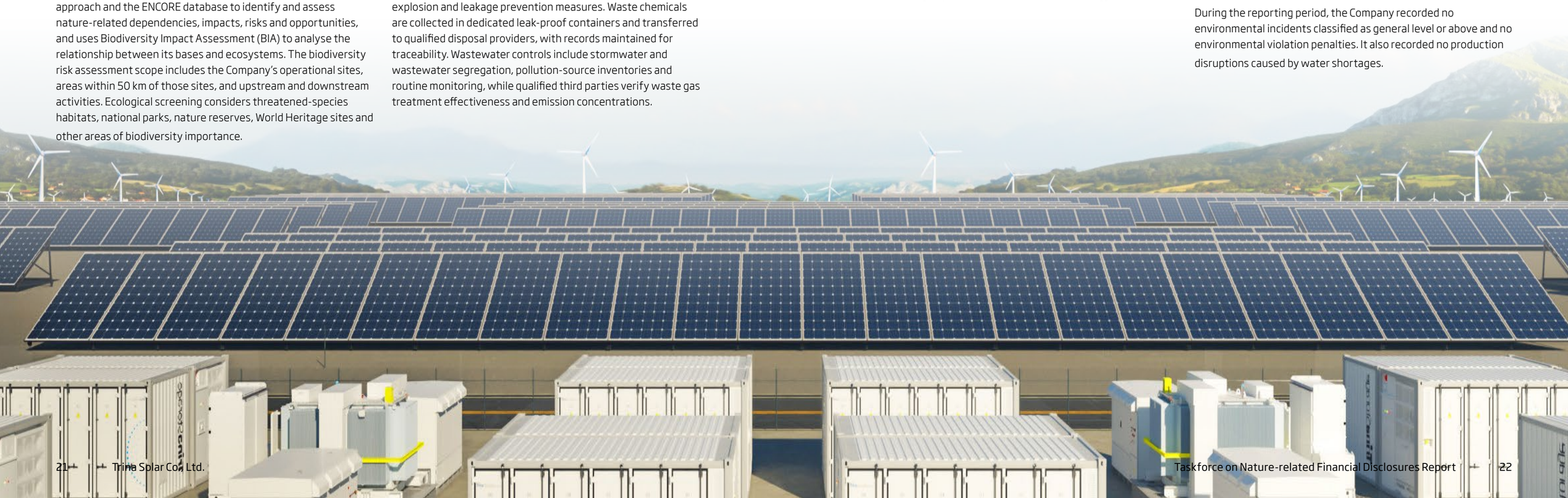
Operational Assurance

The Group EHS Department leads annual internal environmental management system audits covering 100% of bases. As of the reporting date, all stably operating production bases had obtained third-party ISO 14001 certification. In addition, 24 production bases had completed energy audits and obtained ISO 50001 certification, supporting systematic management of energy performance.

Waste management is supervised at Group headquarters, business division and production-base levels. Group headquarters carries out EHS cross-checks and system audits; business divisions conduct quarterly checks and unannounced inspections; and production bases perform routine self-inspections. This structure supports the identification of improvement opportunities and follow-up of waste management measures.

The Hazardous Chemicals Emergency Response Plan is supported by drills, self-inspections and special inspections. The Emergency Response Team activates graded response plans according to incident severity, followed by root-cause analysis and corrective measures. Capacity building includes environmental protection and chemical safety training. More than 6,000 employees participated in the Company's online environmental protection course during 2025.

During the reporting period, the Company recorded no environmental incidents classified as general level or above and no environmental violation penalties. It also recorded no production disruptions caused by water shortages.



Nature-related Management Controls and Coverage

Management area	Control mechanism	Implementation	2025 coverage or result
Environmental factors	Annual identification and evaluation	Bases identify key factors; headquarters consolidate the environmental risk control list.	Defined control measures and handling methods for key factors.
Biodiversity	Biodiversity Conservation Policy and Environmental Impact Assessment (EIA)	Assess operational sites, areas within 50 km, and upstream/downstream activities; use BIA.	Policy revised and biodiversity risk assessment integrated into ERM.
Water stress	WRI Aqueduct Water Stress assessment	Specific response plans at Deyang Polysilicon and Deyang New Materials.	35 bases assessed; 2 extremely high and 11 high stress.
Environmental assurance	Annual internal audits and ISO 14001	Group EHS Department leads audits; third-party certification supports assurance.	Internal audits cover 100% of bases; all stably operating production bases certified.
Waste	Group, division and base supervision	EHS cross-checks and system audits, quarterly checks, unannounced inspections and routine self-inspections.	Classified collection and qualified treatment or disposal.
Emergency response	Hazardous Chemicals Emergency Response Plan	Drills, graded response, root-cause analysis and corrective action.	Environmental protection training reached more than 6,000 employees.

Analysis Method for Nature-related Dependencies, Impacts, Risks and Opportunities

Following the TNFD-recommended LEAP approach (Locate, Evaluate, Assess, and Prepare), Trinasolar has conducted comprehensive assessments of nature-related topics. The method uses qualitative pathways first, identifies evidence and limitations, and only introduces scoring when an approved, evidence-based method is available. This approach enables Trinasolar to mitigate potential negative impacts, proactively capitalize on opportunities for green transition, and provide a scientific foundation for sustainable development decisions.

Locate Identify the Company's interfaces with nature, including operating sites located in or near priority areas, and assess the potential scope of its nature-related impacts and dependencies.

Evaluate Systematically map and evaluate the Company's nature-related dependencies and impacts throughout its value chain, covering direct operations as well as upstream and downstream activities.

Assess Assess material nature-related risks and opportunities across the value chain, and evaluate their financial and strategic significance to the Company.

Prepare Develop response strategies in line with the mitigation hierarchy–avoidance, minimization, restoration, and offsetting–and prepare disclosures consistent with the TNFD Recommendations.

Locate

Trinasolar operates manufacturing facilities and business operations worldwide, with nature-related dependencies and impacts that vary according to local ecological conditions. When selecting and planning sites, the Company considers ecosystem protection requirements and assesses locations against ecological conservation red lines–areas designated by government authorities as critical for ecosystem protection. All operating sites are confirmed to be outside these areas.

Assessment Method

The scope of this assessment covers all Trinasolar's global manufacturing bases and self-owned power plants, totaling 32 operational locations across eight business types, including 10 module bases, 5 solar cell bases, 3 energy storage bases, 3 crystal pulling bases, 2 tracker rack bases, 2 silicon wafer bases, 1 crucible base and 6 power plants. The assessment evaluates the level of nature-related interactions from two dimensions: endangered species and protected areas, analyzing conditions within a 50 km buffer zone surrounding each manufacturing base.

Trinasolar's operational sites by region

Jiangsu, China	20
Sichuan, China	2
Inner Mongolia, China	2
Qinghai, China	2
Zhejiang, China	1
Jilin, China	1
Hebei, China	1
Anhui, China	1
Rest of Asia	1
Spain	1

Trinasolar's operational sites by business type

PV Module Base	10
Solar Cell Base	5
Energy Storage Base	3
Crystal Pulling Base	3
Tracker Base	2
Silicon Wafer Base	2
Crucible Base	1
Power plants	6

Assessment Methodology of Nature-related Interaction Level

Assessment of Interaction with Protected Areas

Analysis Tool	BIA
Analysis Process	Evaluate the number of intersections between each base's 50 km buffer zone and ecological conservation red line areas such as nature reserves and forest parks.
Analysis Indicators	Nature reserves, national parks, natural heritage sites, natural parks, Wetlands of International Importance under the *Ramsar Convention on Wetlands*, and Key Biodiversity Areas (KBAs).

Assessment of Nature-related Interaction Level

Analysis Process

The dimension of endangered species is quantified by counting the standardized number of CR, EN, and VU species, while the dimension of protected areas is quantified by counting the number of relevant protected areas within the buffer zone.

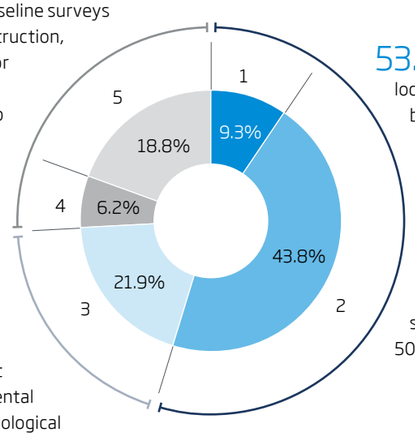
Analysis Rating

The assessment values from the two dimensions are weighed equally at 50% each to determine the level of interaction with nature for each site, rated on a scale from 1 to 5.

Assessment Results

Distribution of Nature-related Interaction Levels at Trinasolar's Operational Sites

25.0% of the sites are assessed as having a high or very high level of interaction with nature. Ecological baseline surveys were carried out during project planning and construction, and measures to avoid, mitigate, or compensate for environmental impacts have been implemented. Environmental monitoring and record keeping help strengthen ongoing process controls.



53.1% of the sites are located in areas with low biodiversity impacts. They are more than 50 km, measured in a straight line, from sensitive ecological areas, and few habitats of Critically Endangered (CR) or Endangered (EN) species are found within a 50 km radius.

21.9% of the sites are rated as having a medium level of interaction with nature. They are mainly located in transitional areas with important ecological functions and are included in environmental impact assessments and site selection reviews. Ecological risk assessment findings inform tailored management measures to meet ecological protection requirements.

Nature-related Interaction Level Rating	Nature-related Interaction Description
1	This represents the most basic degree of engagement with the natural world. The area features limited biological variety and only a handful of conservation zones in the surrounding buffer. Consequently, the effect on the natural environment is negligible.
2	This category indicates a limited connection with nature. Biological diversity is scarce, and there are only a few designated protected regions nearby. The overall influence on the ecosystem remains slight.
3	There is a medium degree of interaction with the environment. The region boasts a fairly diverse range of life and a decent amount of protected land. Because threatened species live in the vicinity, it is crucial to monitor ecological consequences and prevent unneeded disruption to the habitat.
4	This level signifies a strong engagement with the natural environment. The area is teeming with diverse life forms and is home to many threatened species. Implementing robust conservation strategies is highly advised to protect these resources.
5	This represents the peak of interaction with nature. The ecosystem is incredibly diverse, hosting a vast array of at-risk species. Furthermore, the surrounding buffer zone contains several significant nature sanctuaries.

An assessment of species listed on the IUCN Red List found Critically Endangered (CR), Endangered (EN), and Vulnerable (VU) species within 50 km of Trinasolar's operating sites. These species represent diverse taxonomic groups, including fish, birds, insects, mammals, and plants in the classes Liliopsida and Magnoliopsida. The 32 bases and power plants included in the assessment are geographically clustered: bases with high nature-related interaction ratings (Levels 4 and 5) are concentrated mainly in ecologically sensitive areas.

Evaluate

As a contributor to the global energy transition, Trinasolar relies on essential natural resources, including water and land, for its manufacturing activities, while affecting nature through emissions and other forms of pollution.

To assess the relationship between its operations and nature, the Company classifies the upstream and downstream value chain activities of each business segment using the International Standard Industrial Classification (ISIC) and draws on Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) assessment results to identify and evaluate nature-related dependencies and impacts.

This assessment applies the ENCORE framework and ISIC Rev. 5 standards across 24 segments within Trinasolar's solar PV and battery storage value chains. The overall findings demonstrate a distinct bimodal distribution: severe environmental pressures and acute ecosystem dependencies are strictly confined to upstream raw material extraction, chemical synthesis, and downstream power generation. Conversely, "Low" (L) and "Very Low" (VL) ratings dominate more than 50% of the entire matrix, indicating that mid-to-downstream component manufacturing and assembly stages (such as modules, PCS (Power Conversion System), BMS (Battery Management System), and structural parts) operate with limited direct ecological reliance and maintain minimal localized footprints across land transformation, direct greenhouse gas emissions, and biological disruptions.

Trinasolar Nature-related Impact Heatmap-All Business Types and Value Chain



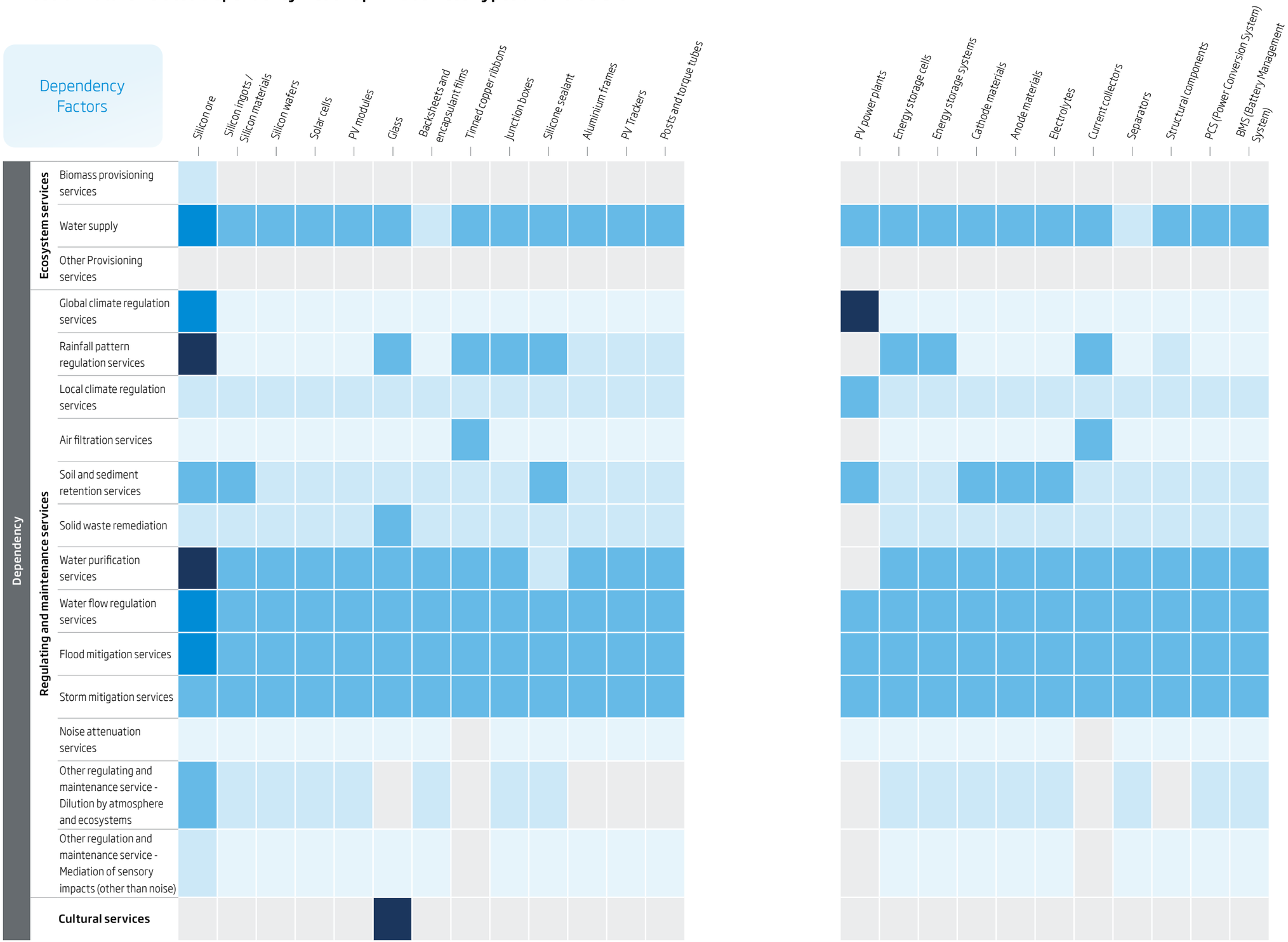
Six Levels of Nature-related Impact

- Not Applicable
- Very Low
- Low
- Medium
- High
- Very High

Regarding nature-related impacts

Environmental pressures exhibit acute chemical toxicity contrasted against broad operational decoupling across other physical categories. Aside from silica quarrying, 23 of the 24 segments generate "Low" (L) pressures or "not applicable" on land use due to compact facility footprints. Similarly, direct greenhouse gas emissions and operational water consumption across midstream and downstream stages (wafers, cells, modules, battery packs, and electronics) are largely evaluated as "Very Low" (VL) or "Low" (L), accompanied by negligible exposure to invasive species or seabed use. In stark contrast, high-severity pressures are tightly clustered around toxic emissions to water and soil as well as physical disturbances (noise and light), which peak at "High" or "Very High" across 17 segments involving polysilicon synthesis, active battery chemicals, electrolytes, and metal rolling. Environmental governance should therefore focus resources on toxic chemical abatement and upstream procurement rather than diffused, cross-category mitigation.

Trinasolar Nature-related Dependency Heatmap-All Business Types and Value Chain



Six Levels of Nature-related Dependency

- Not Applicable
- Very Low
- Low
- Medium
- High
- Very High

Regarding nature-related dependencies

Dependencies follow a clear dichotomy between baseline water reliance and widespread terrestrial and atmospheric decoupling. Across manufacturing and assembly facilities, dependencies on air filtration, noise attenuation, sensory mediation, and biomass provisioning are overwhelmingly rated "Very Low" (VL), while local climate regulation, soil retention, and solid waste remediation are uniformly "Low" (L). This underscores that modern industrial operations rely on engineered infrastructure rather than natural ecosystem buffers. High dependencies are highly site- and node-specific: upstream silica mining depends heavily on natural water purification and rainfall pattern regulation ("Very High"/"High"), whereas operational solar plants depend critically on global climate regulation ("Very High") to sustain consistent solar irradiance and asset reliability. The remaining manufacturing processes maintain a steady, "Medium (M)" dependency on municipal and basin-level water supply and flow regulation.

Assess

Based on its preliminary findings, Trinasolar mapped the pathways of its nature-related dependencies and impacts to identify key physical and transition risks and opportunities. It then assessed each risk's materiality from both impact and financial perspectives.

Analysis of Nature-Related Dependency and Impact Pathways

Across the PV industry value chain–from raw material sourcing and wafer, cell, and module manufacturing to power plant construction and operation–Trinasolar examined key nature-related impact drivers and external drivers of nature change. Together, these factors influence the state of nature and the ecosystem services it provides, which in turn affect society and the Company's business value.

	Impact Drivers and External Trends[1]	Changes in the state of nature	Changes in ecosystem services	Changes in society and business value	Nature-related risks and opportunities	
Resource Use	ID: Water resources are used in the production process of silicon wafers, cells and modules; ET: Climate change increases frequency of droughts	Water flow reduction	Water resources are becoming increasingly scarce, with available water supplies declining and water quality deteriorating	Affect production and domestic water use	Water stress risk Water condition	Physical Physical
Pollution	ID: Pollutant wastewater produced in the production process of silicon wafers and cells ET: Changes of environmental capacity of receiving water bodies caused by regional human and industrial activities	The water quality of the receiving water body exceeds the standard	The self-purification capacity of water body decreases	Stricter water pollutant discharge limits need to be implemented to avoid local health problems	Pollution Tropical cyclones Landslides Changes in regulatory environment risk Litigation risk Reputational management risk	Physical Physical Physical Transition Transition Transition
	ID: Leakage due to aging or damage of impermeable layer	Decreased environmental quality of groundwater	Groundwater self-purification capacity decreases	Strengthen anti-seepage measures to avoid public health risks and social and reputational losses		
	ET: Extreme weather (e.g., heavy rain, flood) increases the load on the network or climate change reduces the change of water pattern, or geological hazards	Soil environmental quality degradation	Water conservation and decline of water supply function Decreased soil quality regulation function			
Climate Change	ID: The production process uses energy sources such as electricity to generate GHG; ET: Climate change increases extreme weather frequency	Rising GHG levels in the atmosphere	Change in global climate regulation capacity	Increasing corporate operating costs and production safety risks requires reducing product carbon footprint and applying green technologies to mitigate the impact of global climate change	Extreme heat Pluvial Floods River Floods Wildfire hazard Green technology investment and cost pressure risk	Physical Physical Physical Physical Transition

[1] ID: Impact Drivers ET: External Trend



Identification of Nature-related Risks and Opportunities

By combining its analysis of nature-related dependency and impact pathways with the WWF Biodiversity Risk Filter (BRF), Trinasolar identified nature-related physical and transition risks, as well as opportunities.

Nature-related physical risks

These arise from the degradation of nature, including changes in ecosystem balance, soil quality, or species composition, which can reduce the ecosystem services that economic activities depend on. Physical risks may be acute or chronic. Acute risks result from sudden events such as pluvial floods, river floods, and tropical cyclones. Chronic risks build over time through pressures such as water scarcity and extreme heat. Trinasolar identified pluvial floods, river floods, and tropical cyclone hazards as acute risks, and water stress and extreme heat as chronic risks.

Nature-related transition risks

These arise when the Company's activities are misaligned with efforts to reduce negative impacts on nature. They are driven mainly by changing policies, markets, technologies, and legal requirements as nature-related challenges receive greater attention. Trinasolar identified key transition risks including regulatory changes, supply chain disruptions, legal exposure, investment needs and cost pressures related to green technologies, market access, responsiveness to customer demand, access to capital, and reputational management.

Nature-related transition opportunities

By proactively addressing nature-related challenges, the Company can create new potential for business growth and improved sustainability performance. These opportunities stem largely from anticipating and responding strategically to policy direction, market shifts, and technological innovation. Business opportunities include developing new products and services, entering new markets, and improving access to financing. Sustainability opportunities include using natural resources sustainably, improving resource efficiency, and supporting ecosystem protection, restoration, and regeneration. Trinasolar identified product and service innovation and improved access to new markets as key business opportunities, alongside the sustainable use of natural resources and ecosystem protection, restoration, and regeneration as key sustainability opportunities.



Prepare

Drawing on its assessment of nature-related dependencies, impacts, risks, and opportunities, Trinasolar has developed a structured response strategy that reflects both the characteristics of the PV industry and the Company's sustainability priorities. It has also established a formal process for developing and implementing responses to material nature-related issues.

Formulation of Response Strategies

Collection and Analysis of Risk Assessment Results	The ESG Management Committee is responsible for collecting assessment data submitted by each manufacturing base and functional department and conducting a comprehensive analysis of these data alongside the preceding assessment results on key nature-related dependencies, impacts, risks, and opportunities to identify priority issues for action.
Formulation of Preliminary Response Plans	For each identified priority issue, the EHS departments at the relevant manufacturing base jointly formulate a preliminary response plan tailored to site-specific operating conditions, specifying the proposed measures, resource requirements, implementation timelines, and expected outcomes.
Management Review and Decision-making	Each preliminary response plan is submitted to the Board's Strategy & Sustainability Committee for final review, during which its strategic alignment, resource adequacy, and compliance with other relevant criteria are assessed to inform approval and decision-making.

Development of Indicator and Target System

For material issues, Trinasolar has created a multi-tiered target framework aligned with the PV industry and the Company's strategic direction. It covers long-term goals, medium-term plans, and short-term actions across areas such as resource use, emissions and pollution, and ecosystem protection. Targets and indicators are assigned to business units and manufacturing bases, with data collection and tracking mechanisms in place. The Company also ties the indicator system to performance evaluations to support implementation and ongoing improvement of its nature-related targets.

Information Disclosure and Reporting Mechanism

Trinasolar has released the TNFD Report, which comprehensively outlines our strategies, initiatives, and performance in addressing nature-related risks and opportunities. We are committed to maintaining transparent communication with our stakeholders–including investors, customers, and local communities–by regularly sharing updates via our website and sustainability publications. By proactively engaging with stakeholder concerns, we aim to uphold high standards of transparency and demonstrate our dedication to environmental stewardship.

03 Strategy

- Nature-related Risks and Opportunities
- Nature-friendly Strategies
- Ecological Protection and Restoration

"Green" is one of Trinasolar's core sustainability principles, reflecting the Company's recognition that nature conservation is essential to a sustainable future. Trinasolar embeds the principles of prioritizing mitigation, protecting ecosystems at the system level, and engaging multiple stakeholders in its decision-making and operations, and has adopted a biodiversity "No Net Loss" strategy to actively support the targets of the Kunming-Montreal GBF. For material nature-related risks and opportunities, the Company develops targeted response plans. Guided by the Science Based Targets Network (SBTN) AR3T Action Framework, Trinasolar advances ecological transformation across its core business activities through the sequence of avoiding and reducing impacts, restoring and regenerating ecosystems, and transforming business practices, while continuing to strengthen its actions for nature.

Nature-related Risks and Opportunities

Following its identification and materiality assessment of nature-related risks and opportunities, Trinasolar identified extreme heat as its principal physical risk. Its key transition risks include changes in the regulatory environment, investment requirements and cost pressures associated with green technologies, and reputational risk.



Nature-related Physical Risks

Trinasolar operates 26 manufacturing bases and 6 power plants across multiple provinces in China and overseas sites. These sites are exposed to five types of physical risks: acute risks comprising pluvial floods, river floods, and tropical cyclones; and chronic risks comprising extreme heat and water stress. The Company mapped 32 manufacturing bases and power plants across its six business segments and systematically assessed how each risk could affect business operations.

Natural Dependencies and Impacts	Physical Risks	Affected Manufacturing Base	Affected Business Segments	Risk Description	Time Horizon	Trend
Water Supply	Water Stress	Qinghai	Silicon Wafer Cells Photovoltaic Power Station	Monocrystalline silicon wafer and solar cell manufacturing are highly dependent on water. Local water scarcity may disrupt production continuity and increase water sourcing and management costs.	Short: Low Medium-to-Long: Medium	→
Global Climate Regulation	Extreme Heat	Jiangsu Anhui Sichuan Rest of Asia	Silicon Wafer Cells Modules Hydrogen Energy Photovoltaic Power Station	Prolonged extreme heat can place additional demands on facility cooling and ventilation systems, leading to higher energy consumption. It can also threaten employee health and workplace safety, necessitating stronger heat protection measures and increasing operational and management costs.	Short: Low Medium-to-Long: High	↗
	Tropical Cyclone	Jiangsu Spain	Modules Trackers Photovoltaic Power Station	Module manufacturing bases in coastal areas may be exposed to tropical cyclones or European winter storms, which can bring heavy rainfall and severe weather, disrupt safe production and equipment operations, and increase maintenance costs. During PV power station operation, extreme winds or cyclonic weather may cause structural damage or water ingress to station equipment, affecting normal equipment operation.	Short: Low Medium-to-Long: Low	→
	Pluvial Floods	Jiangsu Anhui	Silicon Wafer Cells Photovoltaic Power Station	Pluvial (surface water) flooding can occur when rainfall exceeds the capacity of local drainage systems or the ground to absorb runoff. At manufacturing bases or PV power plants, resulting surface water accumulation may flood production areas, access routes, or equipment, disrupting operations and logistics and increasing drainage, repair, and recovery costs.	Short: Medium Medium-to-Long: High	→
Land Use	River Floods	Jiangsu Anhui Rest of Asia	Silicon Wafer Cells Modules Hydrogen Energy Photovoltaic Power Station	River (fluvial) flooding may occur when a river exceeds its capacity and overflows onto nearby land. Facilities or power plants located near rivers or floodplains may be inundated, potentially damaging equipment and access routes, disrupting manufacturing, transport, or power generation, and raising repair and recovery costs.	Short: Low Medium-to-Long: Medium	↗

Low Medium High

We assessed the exposure levels of significant risks across all manufacturing facilities and self-owned power plants under the SSP2-4.5 and SSP5-8.5 climate scenarios, for the 2030- and 2050-time horizons respectively.

Among Trinasolar's 26 manufacturing bases and 6 power plants, the Extreme Heat risk affects the highest proportion of high-impact assets, followed by River Floods risk.

Impact Materiality Level of Nature-Related Physical Risk

Risk Category	Risk Type	SSP2-4.5 2030	SSP2-4.5 2050	SSP5-8.5 2030	SSP5-8.5 2050
Chronic Risk	Water Stress	18.75%	18.75%	18.75%	18.75%
	Extreme Heat	3.13%	81.25%	71.88%	90.63%
Acute Risk	Pluvial Floods	25.00%	28.13%	28.13%	28.13%
	River Floods	6.25%	9.38%	18.75%	25.00%
	Tropical Cyclones / European Winter Storms	6.25%	6.25%	6.25%	6.25%

Impact Materiality Determination Criteria: Proportion of Higher- and High-impact Assets	Low	Medium	High
	<10%	10%-25%	>25%

Financial Impact Assessment

Methodology

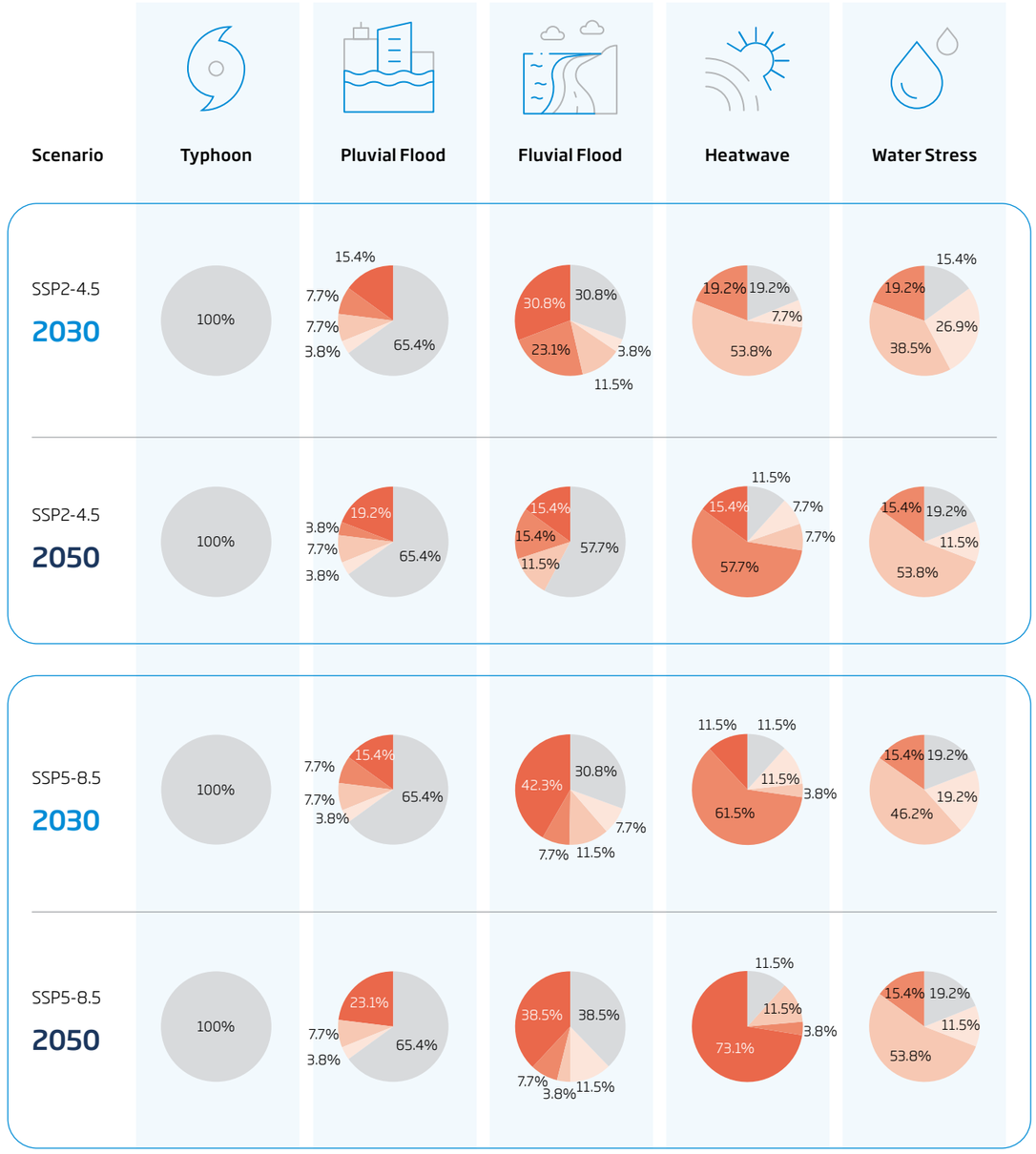
To objectively assess the financial exposure of Trina Solar's manufacturing bases and self-owned power plants to climate risks, we applied tailored approaches aligned with data availability. Facilities scheduled for closure after 2026 were excluded from the 2030 and 2050 outlooks.

Acute Physical Risks (e.g., typhoons, flooding): Financial exposure was modeled using forward-looking climate scenarios and facility-level revenue profiles, with results categorized into five graduated risk tiers based on projected monetary impact.

Chronic Physical Risks (e.g., heatwaves, water stress): Where direct damage metrics are unavailable, a composite scoring framework was applied, integrating operational scale with regional climate indicators to ensure a consistent and balanced five-tier risk classification across all sites.

Results Summary

The following distributions outline the percentage of manufacturing bases and power plants falling into each financial impact category across the four climate scenarios:



Nature-related Transition Risks

Nature-related transition risks arise when a company's activities are misaligned with efforts to reduce adverse impacts on nature, and may be driven by policy, legal, technological, or reputational developments. Trinasolar assesses transition risks across its business segments, prioritizes key risks, and develops corresponding management measures. Its high-materiality transition risks include changes in the regulatory environment, investment in green technologies and related cost pressures, and reputational management.

Type of Transition Risks	Transition Risks	Risk Description	Impact Materiality	Financial Materiality	Time Horizon	Trend
Policy Risk	Changes in Regulatory Environment Risk	As biodiversity protection requirements continue to evolve in China and internationally, companies face growing compliance expectations. If Trinasolar does not update its operating practices in a timely manner or establish a robust biodiversity management system, it may face non-compliance risks, including administrative penalties, production restrictions, or other consequences.	High	High	Short / Medium-to-Long	Increased costs, reduced revenue
	Supply Chain Risk	Supply-chain due diligence requirements, including those under the EU Corporate Sustainability Due Diligence Directive (CSDDD), continue to evolve under the EU's Omnibus I amendments. If Trinasolar does not effectively implement green supply-chain measures or manage biodiversity compliance risks in its raw material sourcing, supplier selection, delivery schedules, and related operations may be affected.	Medium	Medium	Short / Medium-to-Long	Increased costs
Legal Risk	Litigation Risk	Non-compliance with biodiversity protection or pollution control requirements during PV project development or operation may expose Trinasolar to legal consequences, including administrative penalties and obligations to restore affected ecosystems.	Low	Low	Short / Medium-to-Long	Increased costs
Technology Risk	Green Technology Investment and Cost Pressure Risk	Meeting increasingly stringent requirements for environmentally sustainable and biodiversity-friendly products may require Trinasolar to upgrade its environmental processes and invest in pollution prevention and control facilities, placing additional pressure on operating costs.	High	High	Short / Medium-to-Long	Increased costs
Market Risk	Market Access Risk	Major markets continue to develop environmental product requirements and market access rules, including frameworks such as the EU Ecodesign for Sustainable Products Regulation (ESPR). If Trinasolar fails to obtain required certifications in a timely manner or comply with applicable requirements in its target markets, it may encounter trade barriers or restrictions on bidding eligibility, making international expansion more difficult.	Medium	Medium	Short / Medium-to-Long	Reduced revenue
	Customer Demand Response Risk	As demand for biodiversity-friendly products grows among downstream customers and end consumers, gaps in product certification, supply-chain traceability, or the management of operations in ecologically sensitive areas could weaken customer confidence and willingness to collaborate with Trinasolar.	Medium	Medium	Short / Medium-to-Long	Reduced revenue
Capital and Financing Risk	Access to Capital Risk	Significant nature-related incidents could adversely affect Trinasolar's ESG ratings or investor confidence. Institutional investors might adjust their holdings, while the Company could face higher financing costs, putting pressure on capital efficiency and its ability to secure long-term financing.	Medium	Medium	Short / Medium-to-Long	Increased costs
Reputation Risk	Reputational Management Risk	Public disclosure by media outlets or non-governmental organizations of shortcomings in biodiversity or environmental management could attract scrutiny and public criticism, creating potential reputational challenges for Trinasolar.	High	High	Short / Medium-to-Long	Reduced revenue

Low Medium High

Nature-related Opportunities

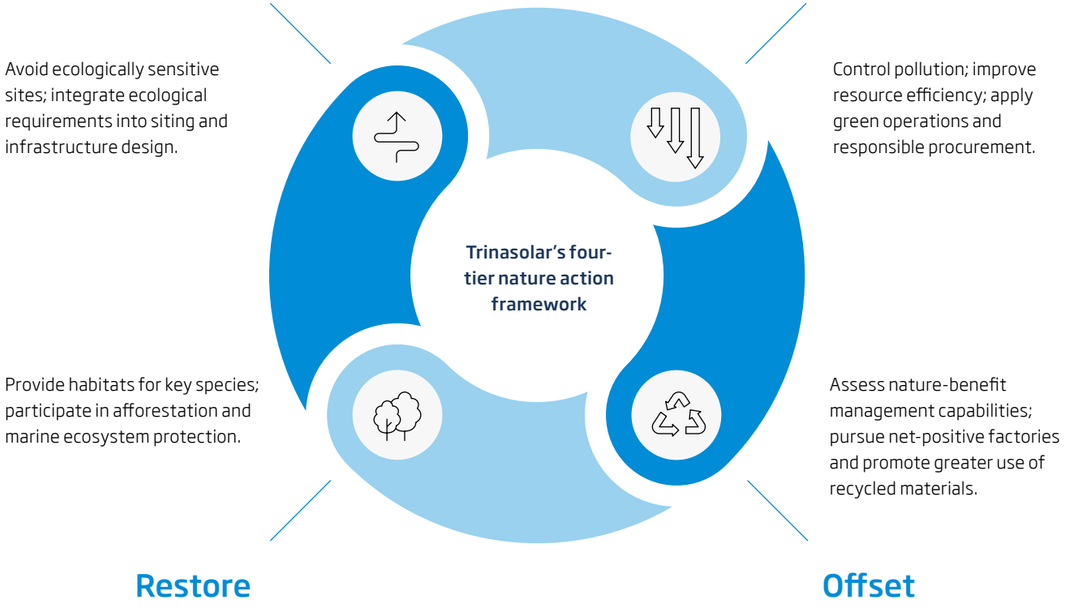
Nature-related opportunities comprise activities that benefit both the Company and nature by generating positive outcomes or reducing adverse impacts on nature. They are broadly classified as business performance-related or sustainability performance-related. Trinasolar's high-materiality transition opportunities relate to its products and services and to reputational capital.

Type of Transition Opportunities	Transition Opportunities	Opportunity Description	Impact Materiality	Financial Materiality	Time Horizon	Trend
Business Performance Opportunities	Products and Services	Developing environmentally friendly PV modules and green hydrogen equipment can help Trinasolar meet global green trade requirements, reinforce its industry leadership, and support revenue growth.	Medium	High	Short / Medium-to-Long	Increased revenue
	Products and Services	Developing integrated PV-and-storage solutions for "Computing-Power Coupling" can help Trinasolar meet growing demand for reliable green power from data centers, strengthen its position in the green computing market, and support revenue growth. Trinasolar uses this term for the integration of computing infrastructure and power systems through PV-plus-storage solutions.	Medium	High	Short / Medium-to-Long	
	Market	By expanding its portfolio of environmentally friendly PV products and pursuing third-party verification, including Environmental Product Declarations (EPDs), carbon footprint assessments, and biodiversity impact evaluations, Trinasolar can respond to increasingly stringent green product requirements in major markets such as the EU. These efforts can strengthen product competitiveness in global sustainable procurement systems, help customers advance their carbon neutrality goals, and broaden the Company's presence in high-value green energy markets.	Medium	Medium	Short / Medium-to-Long	Increased revenue
	Resource Efficiency	Through material substitution, production process optimization, and stronger pollutant controls, Trinasolar can improve resource efficiency in energy and water use, raw material consumption, and waste management. These measures can reduce resource inputs and environmental impacts per unit of output.	Medium	Medium	Short / Medium-to-Long	Decreased costs, increased asset value
	Capital Flows and Financing	Trinasolar can explore green financing instruments, such as sustainability-linked bonds and green bonds, to fund biodiversity conservation and ecological restoration projects. By setting measurable environmental targets and linking them to financing terms, the Company can optimize its capital structure, lower financing costs, expand its participation in green financial markets, and strengthen its credit profile.	Medium	Low	Short / Medium-to-Long	Decreased costs
	Reputation Capital	Continued investment and action in biodiversity conservation and ecosystem management can reinforce Trinasolar's reputation as a responsible company committed to sustainable development. The resulting performance can also support ESG ratings, build stakeholder trust, and strengthen the Company's standing in the international community.	High	Medium	Short / Medium-to-Long	Increased asset value
Sustainability Performance Opportunities	Sustainable Utilization of Natural Resources	Extending the service life of PV modules and solar cells, improving product recyclability, and adopting closed-loop materials management can reduce resource consumption and the ecological footprint across the lifecycle of PV power generation while improving overall resource efficiency.	Medium	Low	Short / Medium-to-Long	/
	Ecosystem Conservation and Restoration	On marginal land, such as degraded grasslands, saline-alkali areas, and abandoned mining sites, Trinasolar promotes "Agriculture + Photovoltaic" (Agro-PV) projects to combine energy production with ecological restoration. Around its production sites, the Company is also implementing measures such as green roofs, ecological buffer zones, and native plant communities to create suitable microhabitats for local species, including birds and insects, and support regional biodiversity recovery and ecosystem functions.	Medium	Low	Short / Medium-to-Long	/

Low Medium High

Nature-friendly Strategies

Trinasolar follows the four-tier action principle of Avoid, Minimize, Restore and Offset, integrating biodiversity protection into project development and operations. The Company's Biodiversity Conservation Policy covers its operations, supply chain and partners, with the aim of minimizing ecosystem impacts, striving to avoid net loss of biodiversity and pursuing a net positive impact. Its strategies combine ecological avoidance, efficient resource use, circular product management and collaboration with conservation and business partners.



Four-tier action framework disclosed in Trinasolar's 2025 Sustainability Report (p. 71).

Trinasolar implements these principles through its full lifecycle green management framework. The five stages below connect product innovation, supplier management, manufacturing, logistics and end-of-life recovery with resource efficiency, pollution prevention and ecosystem protection.

Lifecycle stage	Nature-related priorities and principal measures
Green R&D and Design	Develop clean technologies; improve durability, material efficiency, disassembly and recyclability; assess environmental impacts during design.
Responsible Material Management	Assess carbon and water footprints, supplier ESG performance and material recovery potential; increase recycled and renewable inputs and control hazardous substances.
Cleaner Production and Manufacturing	Improve energy and water efficiency; prevent pollution; manage waste and hazardous materials; expand clean energy use and strengthen carbon data management.
Green Distribution, Storage, and Logistics	Optimize transport and warehousing; expand road–rail intermodal transport; reduce single-use packaging and increase reusable packaging.
Decommissioning, Recycling, and Resource Recovery	Develop collection, disassembly, recycling, and resource recovery for PV modules, batteries and mounting systems; support extended producer responsibility.

Green R&D and Design

Clean Technology Research and Development

Trinasolar innovates at the intersection of PV products, energy storage, and intelligent energy management systems to power the global green transition. Our R&D focuses on developing integrated solar-plus-storage architectures and smart energy solutions capable of adapting to diverse application scenarios (including utility ground-mounted, C&I microgrids, and off-grid reserves). In 2025, R&D investment reached RMB 4.078 billion, equivalent to 6.09% of revenue, and 100% was dedicated to clean energy technologies. Our research closely links high-efficiency system performance with lifecycle environmental stewardship, material durability, and circularity.



Ecodesign and Product Durability

Environmental impact assessment is being incorporated into product design and development. Green design considers material reuse, lightweight structures, ease of operation and maintenance, disassembly and recycling, and environmental impacts throughout the lifecycle. Product lifespan analysis and optimization begin at the R&D stage, helping extend replacement cycles and reduce resource consumption. Specialized training on sustainable product lifecycle management supports implementation across project initiation, planning and delivery.

Responsible Material Management

Green Supply Chain

Trinasolar evaluates product carbon footprints, environmental impacts, supplier ESG performance and end-of-life recovery potential when selecting and introducing materials. Together with suppliers and partners, the Company seeks to reduce product carbon and water footprints, increase the use of recycled and renewable raw materials, and reduce hazardous substance content. Sustainable materials management is included in supply chain internal auditor training and annual training for relevant departments.

The supplier CSR code requires water management plans, recording and monitoring of water sources, use and discharge, identification of water-saving opportunities, and treatment of wastewater before discharge or disposal. Suppliers are also required to monitor wastewater treatment and control systems. The Biodiversity Conservation Policy promotes efficient management of water, land and energy and collaboration on deforestation risks. In 2025, 100% of new suppliers were screened and assessed using environmental and social criteria.

Cleaner Production and Manufacturing

Green and Low-Carbon Operations

Trinasolar combines environmental management systems, operational controls and performance targets to improve manufacturing efficiency and reduce environmental impacts. All stably operating production bases had obtained ISO 14001 certification as of the reporting date, while annual internal environmental management audits covered 100% of bases. The Company had four national-level, 13 provincial-level and one municipal-level green factories. More than 6,000 employees participated in its online environmental protection course in 2025. No environmental incidents classified as general level or above and no environmental violation penalties were recorded during the reporting period.



Energy Management

Energy conservation, efficiency improvements and clean energy substitution are supported by energy and resource management procedures, real-time energy monitoring, energy audits and staff training. In 2025, 24 production bases completed energy audits and obtained ISO 50001 certification. Energy-saving innovation covered all stably operating bases: 57 improvement projects received investment of RMB 33.30 million and delivered estimated annual electricity savings of 144,571.09 MWh. Measures included motor replacements and intelligent controls at Changzhou, workshop air-handling optimization at Yangzhou, and waste heat recovery at Huai'an.

Renewable energy consumption reached 100,164.84 tonnes of coal equivalent (tce), representing 12.62% of total energy consumption. At Yangzhou, a 35 MW rooftop and carport PV power station was connected to the grid in April 2025 and is expected to meet approximately 10% of the base's total energy consumption. Comprehensive energy intensity was 6.47 tce/MW for cells and 1.55 tce/MW for modules, down 28.16% and 53.18%, respectively, from 2020.



Water Resources Management

Water stewardship combines water-risk assessment, water balance testing, metering, reuse and consumption-intensity targets. In 2025, the Company assessed water stress at 35 domestic and overseas bases using the WRI Aqueduct Water Risk Atlas: two were in extremely high-stress areas, 11 in high-stress areas, 19 in medium-high-stress areas and three in low-stress areas. Specific response plans at the Deyang Polysilicon and Deyang New Materials bases focus on water sourcing and efficiency. All stably operating production bases are equipped with real-time water monitoring devices connected to online systems, and water-saving measures cover all stably operating bases.

Water-saving projects address both production demand and community water security. At Huai'an Cell Base, reuse of first-stage reverse-osmosis concentrate through an ROR system saves approximately 438,000 tonnes of water annually. At the Qinghai Polysilicon Base, upgrading the cooling-tower make-up system increased water utilization from below 70% to above 80%. Optimized storage and constant-pressure, constant-flow supply reduced peak water intake by approximately 40% in a community water-supply initiative. In 2025, cell and module water consumption intensities fell to 86.53 and 13.55 tonnes/MW, respectively, exceeding the 2025 reduction targets. No production disruptions caused by water shortages were recorded.

Wastewater Management

Wastewater controls include stormwater and wastewater segregation, pollution-source inventories, routine monitoring and treatment before discharge. The Company prevents firefighting water, leaked chemicals and contaminated surface runoff from entering stormwater systems. At Yangzhou, acid and alkali wastewater segregation increased calcium fluoride content in sludge to above 90% and reduced sludge generation intensity by 68%. Total wastewater discharge in 2025 was 25.8771 million tonnes, and 100% of wastewater discharged after treatment met applicable standards.

Waste Gas Management

Trinasolar manages waste gas through source reduction, process controls and end-of-pipe treatment, with qualified third parties monitoring treatment performance and emission concentrations. Controls address nitrogen oxides, sulfur oxides, volatile organic compounds, ammonia and particulate matter. At the Dafeng energy storage base, N-methyl-2-pyrrolidone (NMP) emissions are treated using two-stage activated carbon adsorption and discharged through a 15-metre exhaust stack; annual NMP emissions were approximately 0.0048 tonnes.

Solid Waste Management

Waste is classified, collected, stored and transferred to qualified treatment or disposal providers, with records maintained for traceability. Group EHS cross-checks and system audits, business division quarterly checks and unannounced inspections, and routine base self-inspections support implementation. In 2025, 139,785.22 tonnes of non-hazardous waste were recycled and the reported non-hazardous waste recycling rate was 98.10%. Manufacturing improvements reduced hydrofluoric acid consumption from 150 to approximately 100 litres/MW, while the fluoride sludge diversion rate exceeded 50%.

Hazardous Materials Management

The Chemical Management Procedure covers procurement, transport, storage, use and disposal. New hazardous chemicals undergo environmental, health and safety assessment before procurement; segregated storage, leak prevention and dedicated containers support safe handling. Hazardous chemical emergency plans are supported by drills, inspections, graded response and corrective action. Product controls cover 100% of hazardous substances and 100% of product types containing them. During 2025, human health and environmental risk assessments covered all products with potential hazardous substance risks, supported by incoming inspection, production controls, outbound inspection and supplier requirements.

Carbon Data Management

Trinasolar's digital product carbon footprint platform connects data collection, calculation and analysis, report generation and certification across the lifecycle. Compatible with ISO 14067 and ISO 14044, it integrates supplier relationship management, enterprise resource planning and manufacturing execution systems. Carbon footprint models cover 20 product categories and 100% of the Company's product portfolio, and the platform can automatically generate more than 20 compliance reports. The system has been certified by TÜV Rheinland. Carbon data supports product design, supplier management and responses to customer disclosure requirements.



Green Distribution, Storage, and Logistics

Low-Carbon Transport and Packaging

Trinasolar optimizes distribution, storage and transport to reduce environmental impacts and improve delivery efficiency. Road–rail intermodal transport combines road transport at both ends with rail for the main journey; its share of domestic shipments reached 28.5% by the end of 2025. In August 2025, the Company's first dedicated container train transported 20.5 MW of PV modules over 4,067 km. Loading and unloading efficiency improved by more than 30% compared with traditional boxcar transport, alongside lower cargo damage and unit carbon emissions.

Packaging management applies Reduce, Reuse, Recycle and Recover principles. The Company encourages suppliers to increase reusable packaging and reduce reliance on single-use materials. Packaging and circular material requirements extend to procurement, production, warehousing and recycling, supporting resource efficiency across delivery and product recovery.



Decommissioning, Recycling, and Resource Recovery

Circular Economy and Product Recovery

Trinasolar has been actively advancing dedicated R&D efforts focused on PV laminate dismantling technologies. Currently, the mainstream technological route in the industry is pyrolysis, which requires high-temperature processing between 500°C and 600°C. This process is hindered by significant pain points, notably high energy consumption and the generation of exhaust gases. To overcome these industry bottlenecks, Trinasolar has independently developed an innovative non-pyrolysis dismantling technology. Having successfully completed rigorous experimental validation, this breakthrough offers comprehensive advantages: significantly lower energy consumption, superior economic viability, and a highly eco-friendly profile. Looking ahead, the company is set to continuously drive the equipment implementation and industrial-scale application of this technology in 2027.

In parallel, over the past two years, Trinasolar has collaborated with leading domestic and international research institutions to achieve joint technical breakthroughs in the comprehensive dismantling of PV modules, as well as the recovery and extraction of critical materials such as silver and silicon. To date, the company has secured 40 related patents, including more than 30 invention patents. Furthermore, Trinasolar has led or co-authored 7 industry standards within the PV recycling sector and undertaken 2 national-level special research projects on the circular economy. Through these continuous efforts, Trinasolar is rapidly solidifying its foundational capabilities in both technological innovation and standard-setting for PV module recycling.

Ecological Protection and Restoration

Trinasolar integrates biodiversity protection across project planning, site selection, and operations, while actively deploying tailored smart energy and integrated solar-plus-storage solutions engineered for specific ecological and geographical scenarios. From sensitive wetland reserves and high-altitude alpine meadows to arid deserts and reclaimed industrial land, the Company demonstrates that renewable energy infrastructure and natural restoration can reinforce one another. All manufacturing bases and self-owned power plants comply strictly with ecological red lines, located in approved industrial parks outside sensitive zones. Below are signature practices demonstrating how our scenario-specific smart energy solutions safeguard nature.

Case Study Trina Forest Restores Degraded Land with Native Trees

Launched in December 2024 with Spanish ecological organization ReTree, the Trina Forest project covers 14,016 m² of degraded land in the Vértice del Frío area north of Madrid. The programme runs through 2027 and plans to plant 1,500 native trees; an initial batch of 500 trees was planted at launch. Native species are prioritized to rebuild local woodland communities and reduce the risk of introducing invasive species. The Treegital digital monitoring platform tracks tree survival, soil recovery and carbon data over time. The project aims to improve soil structure, reduce erosion and restore forest ecosystem services, with local participation in ecological maintenance.

the Trina Forest project covers degraded land

14,016 m²

Plans to plant native trees

1,500



Case Study Dongtan Microgrid Supports Low-Disturbance Wetland Protection

In September 2025, a small off-grid PV-storage-charging microgrid entered operation at the Shanghai Chongming Dongtan National Nature Reserve for Birds. Developed with NIO, the United Nations Development Programme and the Nanjing Institute of Environmental Sciences of the Ministry of Ecology and Environment, it is the first site under the UNDP-NIO Clean Parks initiative. The microgrid provides clean power for reserve patrol operations. A small, dispersed construction footprint limits land occupation, while low-tilt PV modules are designed to reduce interference with migratory birds' flight sightlines. The project supports the transition away from fossil-fuel-based patrol energy and helps reduce associated noise, emissions and oil-contamination risks. Dongtan is a key stopover on the East Asian–Australasian Flyway, with 364 recorded bird species.

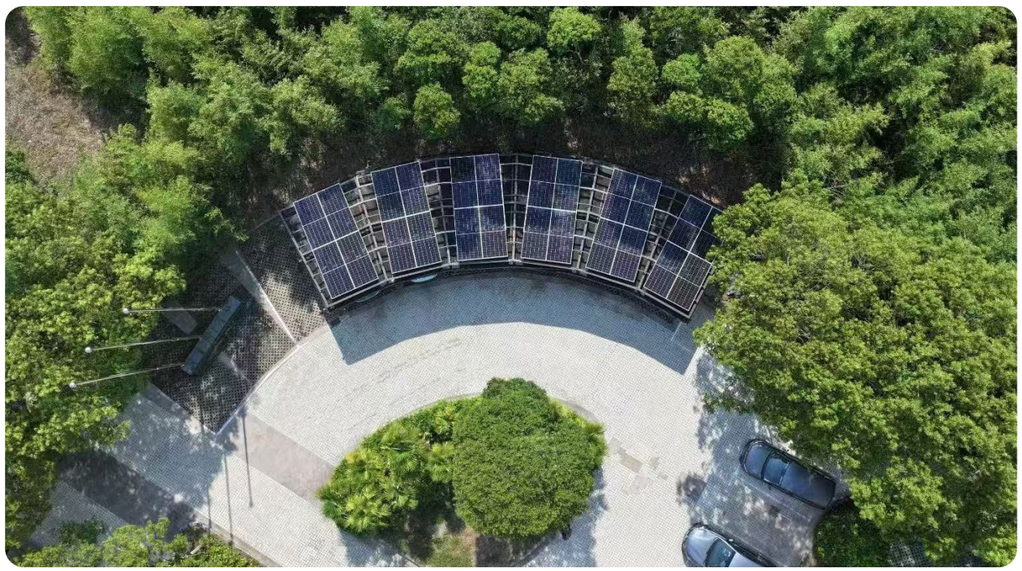
1st
Site

364
Species

3
Partners

Powering the Future of Dongtan





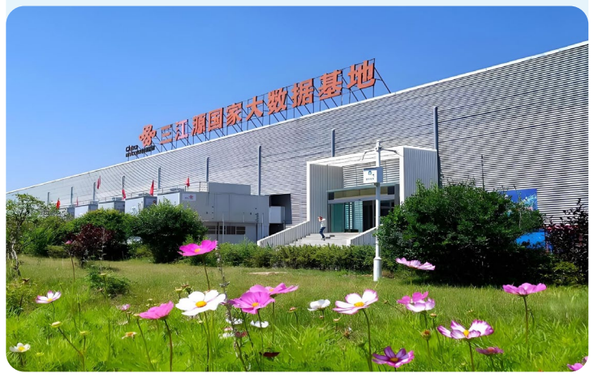
Case Study Sanjiangyuan Microgrid Integrates Renewable Power and Computing

Commissioned in 2025 with China Unicom, the Sanjiangyuan intelligent microgrid demonstration project in Qinghai combines 6.18 MWp of PV capacity, 30 kW of wind generation and a 500 kW/1,044 kWh energy storage system, together with charging facilities. It integrates local generation, storage, electricity demand and computing infrastructure to supply clean power in a high-altitude, ecologically sensitive region. Lightweight construction and limited excavation help protect native alpine meadows. Local use of renewable electricity also reduces the need for associated long-distance transmission infrastructure, supporting a lower-disturbance approach to energy supply in the headwater region of the Yangtze, Yellow and Lancang rivers.

6.18 MWp of PV capacity

30 kW of wind generation

500 kW energy storage system



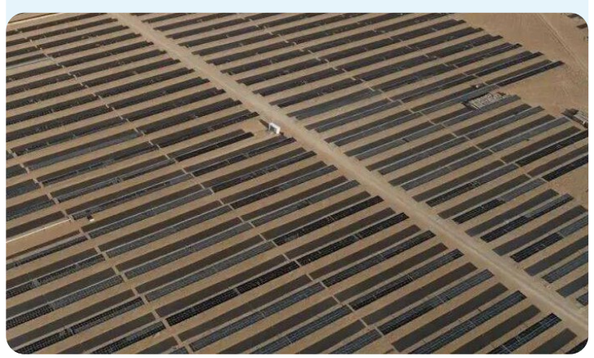
Case Study Nur Navoi Solar Project Supports Desert Land Stewardship

The 100 MWp Nur Navoi PV project in Uzbekistan entered operation in August 2021. Trinasolar supplied Vertex bifacial modules and 2,618 Vanguard 2P trackers for the project. In the arid desert setting, the PV arrays provide wind shelter and shade, helping reduce wind erosion, sand movement and evaporation from the ground beneath the modules. This combination of clean electricity generation and land stewardship supports efforts to manage desertification pressures. The project's annual CO_2 emission reduction is reported at approximately 150,000 tonnes.

100 MWp Nur Navoi PV project

2,618 Vanguard 2P trackers

150,000 tonnes of CO_2 emission reduction



Case Study Talatan Integrates Solar Power, Grazing and Desert Restoration

At Talatan in Gonghe County, Hainan Prefecture, Qinghai, the 1,000 MWp integrated solar and energy storage project combines renewable electricity generation with grazing and desert restoration. Trinasolar supplies Vertex modules for the project with CNNC Huineng. The PV arrays support sand stabilization across approximately 24,000 mu. Raised mounting structures, straw checkerboard barriers and ecological fencing help reduce wind erosion and sand movement. Shade beneath the modules reduces ground-level evaporation and supports vegetation recovery. Space between the arrays accommodates pasture and sheep grazing: sheep consume dry grass, reducing combustible material, while manure supports soil improvement. Construction seeks to limit ground disturbance and extensive surface hardening, helping integrate energy production with the restoration of degraded plateau land.

1,000 MWp integrated solar and energy storage project

~24,000 mu PV arrays support sand stabilization across



Case Study Taohua Solar Project in Tengxian Supports Rehabilitation of a Former Gold Mine

The 25 MWp Taohua solar project in Tengxian, Wuzhou, Guangxi, reuses approximately 294 mu of land at a former gold mine. Construction began in December 2021 and the project was connected to the grid in 2022. Trinasolar supplied Vertex 210 modules for the project with Guoneng Energy. The karst mining site faced exposed slopes, soil erosion and localized rocky desertification risks. Reusing the former mining land reduces pressure to occupy agricultural land, while slope stabilization and revegetation support rehabilitation of the damaged site. The project combines renewable electricity generation with the restoration and productive reuse of previously disturbed land.

25 MWp Taohua solar project

294 mu of land at a former gold mine



04 Metrics and Targets

Nature-related Targets

Nature-related Metrics

Trinasolar tracks nature-related management through targets and performance indicators covering water, resource use, pollution, waste and biodiversity protection. The disclosures below present the Company's existing commitments and 2025 performance, including energy and greenhouse gas indicators that describe the climate-nature relationship.

Nature-related Targets

Trinasolar's targets address water efficiency, energy use, emissions and responsible operations, alongside continuing commitments to biodiversity protection and zero deforestation across operations and the value chain. The table sets out the quantitative targets and policy commitments, their scope and time horizons, and progress in 2025.

SBTi-Validated Targets

Following the 2025 reporting period, Trinasolar received formal notification on 14 October 2026 that its near-term, long-term and net-zero greenhouse gas emission targets had been validated by the Science Based Targets initiative (SBTi). The validated emission reduction targets use 2025 as the base year.

Overall Net-Zero Target Trinasolar commits to reach net-zero GHG emissions across the value chain by 2050.

	Near-term Targets	Long-term Targets
	by 2035	by 2050
Scope 1 and Scope 2 Absolute GHG emissions	Reduce absolute Scope 1 and Scope 2 GHG emissions by **65.9%** from the 2025 base year.	Reduce absolute Scope 1 and Scope 2 GHG emissions by **90.0%** from the 2025 base year.
Scope 3 GHG emissions per unit of product	Reduce Scope 3 GHG emissions from purchased goods and services per unit of product by **66.3%** from the 2025 base year.	Reduce Scope 3 GHG emissions from purchased goods and services and fuel- and energy-related activities, per unit of product by **97.0%** from the 2025 base year.

Nature-related Targets and Progress

Theme	Target or commitment	Baseline and scope	Time horizon	2025 progress
Water	Reduce cell water consumption intensity by 20%	2020; cell production; tonnes/MW	2025	86.53 tonnes/MW; down 91.62%. Target exceeded
	Reduce module water consumption intensity by 20%	2020; module production; tonnes/MW	2025	13.55 tonnes/MW; down 84.02%. Target exceeded
	Reduce water consumption per unit of product by 10%	2025; operational level	2035	Target set at the end of 2025
	Reduce water consumption per unit of product by 20%; advance value-chain water reduction actions	2025; operational intensity target	2050	Target set at the end of 2025
Energy	Reduce comprehensive energy intensity of cell production by 40%	2020; cell production; tce/MW	2025	6.47 tce/MW; down 28.16%. Target not achieved
	Reduce comprehensive energy intensity of module production by 40%	2020; module production; tce/MW	2025	1.55 tce/MW; down 53.18%. Target exceeded
Pollution	No environmental penalty incidents	Company environmental compliance	2025	No environmental penalty incidents. Target achieved
Supply chain	Screen and assess 100% of new suppliers using environmental and social criteria	New suppliers	2025	Coverage of 100%. Target achieved
Biodiversity	Strive to avoid net loss of biodiversity and pursue a net positive impact	Operations, supply chains and partners	Continuing policy commitment	Policy updated in 2025; biodiversity risk assessment integrated into ERM
Forests	Protect forest resources with the objective of zero deforestation; encourage equivalent supplier and partner commitments	Operations, supply chains and partners	Continuing policy commitment	Responsible procurement and compliance with local forest protection requirements

Nature-related Metrics

The table presents Trinasolar's 2025 resource use, emissions, waste and nature-related management indicators. Environmental performance data cover production bases in stable operation unless otherwise stated; assessment and certification indicators retain their disclosed scopes. Greenhouse gas emissions use the operational-control approach, with Scope 3 reported separately. Management coverage indicators describe actions and systems rather than measured biodiversity outcomes.

Trinasolar Nature-related Performance in 2025

Driver or area	Metric	Unit	2025
Water resources	Total water withdrawal	10,000 tonnes	4,041.86
	Conventional water source withdrawal	10,000 tonnes	3,564.45
	Alternative water source withdrawal	10,000 tonnes	477.41
	Total water consumption	10,000 tonnes	992.11
	Freshwater consumption	10,000 tonnes	3,564.45
	Ultra-pure water usage	10,000 tonnes	1,712.41
	Reclaimed water usage	10,000 tonnes	468.83
	On-site reclaimed water usage	10,000 tonnes	462.05
	Other reclaimed water usage	10,000 tonnes	6.78
	Process cooling water circulation	10,000 tonnes	95,014.12
	Share of alternative water sources	%	11.81
	Water reuse rate	%	11.60
	Water circulation utilization rate	%	95.92
	Water recycling rate including reuse and circulation	%	96.39
	Cell water consumption intensity	tonnes/MW	86.53
	Module water consumption intensity	tonnes/MW	13.55
	Energy storage water consumption intensity	tonnes/MWh	38.52
	Crystal pulling water consumption intensity	tonnes/tonne	33.52
	Wafer slicing water consumption intensity	tonnes/million wafers	131.43
	Crucible production water consumption intensity	tonnes/tonne	18.15
Water pollution	Total wastewater discharge	10,000 tonnes	2,587.71
	Industrial wastewater discharge	10,000 tonnes	2,421.76
	Domestic wastewater discharge	10,000 tonnes	165.95
	Wastewater discharged after treatment meeting standards	%	100.00
	Chemical oxygen demand emissions	tonnes	824.37
	Ammonia nitrogen emissions	tonnes	229.75
	Total phosphorus emissions	tonnes	11.32
	Total nitrogen emissions	tonnes	571.66
	Suspended solids emissions	tonnes	291.26
Air pollution	Total waste gas emissions	100 million m^3	788.43
	Nitrogen oxides (NOx)	tonnes	13.28
	Sulfur oxides (SOx)	tonnes	0
	Fluorides	tonnes	24.24
	Chlorides	tonnes	36.53
	Ammonia	tonnes	142.31
	Particulate matter	tonnes	26.91
	Volatile organic compounds	tonnes	137.84
Waste and circularity	Total waste	tonnes	149,770.98
	Non-hazardous waste generated	tonnes	145,466.50
	Non-hazardous waste recycled	tonnes	139,785.22
	Non-hazardous waste landfilled	tonnes	0
	Non-hazardous waste incinerated	tonnes	5,681.28
	Of incinerated non-hazardous waste: energy recovery	tonnes	2,916.67
	Non-hazardous waste recycling rate	%	98.10
	Hazardous waste generated	tonnes	4,304.47
	Hazardous waste transported and disposed	tonnes	4,210.31
	Hazardous waste landfilled	tonnes	286.44

Driver or area	Metric	Unit	2025
Waste and circularity	Hazardous waste incinerated	tonnes	1,186.44
	Of incinerated hazardous waste: energy recovery	tonnes	649.93
	Of incinerated hazardous waste: no energy recovery	tonnes	536.51
	Hazardous waste disposed by other methods	tonnes	2,737.42
Energy resources	Total energy consumption	tce	793,621.00
	Direct energy consumption	tce	3,816.83
	Indirect energy consumption	tce	789,804.17
	Renewable energy consumption	tce	100,164.84
	Non-renewable energy consumption	tce	693,456.16
	Share of renewable energy in total energy consumption	%	12.62
	Electricity consumption	MWh	6,426,396.83
	Municipal Electricity Purchase	MWh	5,611,385.95
	On-site renewable electricity generation	MWh	277,916.79
	Off-site renewable electricity purchase	MWh	537,094.09
	Cell comprehensive energy intensity	tce/MW	6.47
	Module comprehensive energy intensity	tce/MW	1.55
Climate change	Scope 1 emissions	10,000 tCO_2e	7.43
	Scope 2 emissions - location-based	10,000 tCO_2e	304.95
	Scope 2 emissions - market-based	10,000 tCO_2e	304.95
	Operational emissions - location-based	10,000 tCO_2e	312.39
	Operational emissions - market-based	10,000 tCO_2e	312.39
	Scope 3 emissions	10,000 tCO_2e	2,544.23
	Upstream Scope 3 emissions	10,000 tCO_2e	2354.51
	Downstream Scope 3 emissions	10,000 tCO_2e	189.73

Driver or area	Metric	Unit	2025
Management response	Domestic and overseas bases assessed for water stress	bases	35
	Bases in extremely high water-stress areas (>80%)	bases	2
	Bases in high water-stress areas (40%-80%)	bases	11
	Bases in medium-high water-stress areas (20%-40%)	bases	19
	Bases in low water-stress areas (<10%)	bases	3
	Manufacturing bases in approved industrial parks, outside ecologically sensitive zones	%	100
	Internal environmental management audit coverage	% of bases	100
	ISO 14001 certification coverage	% of stably operating production bases	100
	Water-saving measures coverage	% of stably operating production bases	100
	Production bases completing energy audits and ISO 50001 certification	bases	24
	Total investment in energy conservation and environmental protection	RMB 10,000	21,829.63
	Environmental protection course participants	employees	More than 6,000
	Environmental incidents at general level or above	incidents	0
	Environmental violation penalty records	records	0
	New suppliers screened and assessed using environmental and social criteria	% of new suppliers	100

Appendix: TNFD Reporting Index

Theme	Recommended Disclosures	Corresponding Section of the Report
Governance	A. Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.	• Governance Structure • Directors and Senior Executives Engagement
	B. Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.	• Governance Structure • Directors and Senior Executives Engagement
	C. Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, Local Communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.	• Governance Structure • Directors and Senior Executives Engagement
Strategy	A. Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short, medium and long term.	• Nature-related Risks and Opportunities
	B. Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.	• Nature-related Risks and Opportunities
	C. Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.	• Nature-related Risks and Opportunities • Nature-friendly Strategies
	D. Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.	• Analysis Method for Nature-related Dependencies, Impacts, Risks and Opportunities

Theme	Recommended Disclosures	Corresponding Section of the Report
Risk and impact management	A(i) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.	• Analysis Method for Nature-related Dependencies, Impacts, Risks and Opportunities
	A(ii) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).	• Analysis Method for Nature-related Dependencies, Impacts, Risks and Opportunities
	B. Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.	• Nature-related Management System
	C. Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.	• Nature-related Management System
Metrics and targets	A. Disclose the metrics used by the organisation to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.	• Nature-related Metrics
	B. Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.	• Nature-related Metrics
	C. Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.	• Nature-related Targets


Trinasolar