



2024

Taskforce on Nature-related Financial  
Disclosures (TNFD) Report



# Preface

## Delivering Solutions for Global Challenges

The past decade has seen climate risks become buzzwords, with frequent “black swan” and “gray rhino” extreme events. As climate uncertainty increases, we have witnessed rapid updates of green technologies, breakthroughs and transformations across sectors, and the timely acceleration of renewable energy - unfolding a world driven by sustainable transformation. As technologies and markets grow more mature, receding tides reveal emerging challenges. The way we approach industry competition, examine industrial structures, and practice long-termism has become an imperative of our time.

**We choose to do what is difficult but what is right.** In 2024, we officially released our “Climate Strategy Roadmap”, upgraded our green closed-loop initiative of “Solar for Solar,” and embarked on exploring the development of a “Natural Strategy Roadmap”. We broke world records for the 30th time, with the laboratory conversion efficiency of the monocrystalline silicon cells based on high-efficiency N-type TOPCon reaching 27.02%, and that of the perovskite tandem solar cells based on N-type TOPCon reaching 34.22%. Concurrently, we are redefining our relationship with nature and society by embedding sustainable principles into our core business operations and

management practices. This approach has yielded recognition: we were successfully selected for the *S&P Global Sustainability Yearbook*, marking a breakthrough achievement for PV module manufacturers. Through the integration of digital technologies into our zero-carbon manufacturing system, we have earned industry-leading CDP scoring for climate change, included in the SEA (Supplier Engagement Assessment) A-list and awarded the Supplier Engagement Leader badge, representing a remarkable three-tier progression from advocate to industry leader. Incorporating a global perspective into our partner ecosystem development, we collaborated with ecosystem partners across the “Belt and Road Initiative” countries’ industrial chains to jointly release the Initiative for Global Solar Sustainable Alliance (GSSA).

**We believe technology should be eco-friendly and inclusive.**

Jinko Solar's high-efficiency, low-LCOE solar-storage products deliver clean power to nearly 200 countries and regions. From the Tibetan Plateau to the Yellow River estuary, from Kenya's Garissa to French Polynesia, we contribute to economic development and ecological conservation with our green, low-carbon products and services. Jinko Solar was the only

photovoltaic company which received the inaugural Belt and Road International Cooperation Award from the International Finance Forum (IFF) in 2024. The photovoltaic power plant project in Garissa, Kenya was praised by the President of Kenya for “bringing stable power supply to Garissa and contributing to the local economic development”.

This inaugural nature-related report reflects our philosophy of corporate-nature coexistence. We invite stakeholders to join us in contemplating sustainable energy transition's long-term challenges and exploring PV companies' pathways and models for global green development.

**The stars shine bright for all who forge ahead. At this historic juncture, we pledge to collaborate with partners from all walks of life to create a 100% solar-powered future where technological progress meets social responsibility!**

# About This Report

With reference to mainstream disclosure standards, Jinko Solar Co., Ltd. (hereinafter referred to as “Jinko Solar”, “the Company”, or “we”) has released our first Taskforce on Nature-related Financial Disclosures (TNFD) Report in 2025 after our first Climate Action White Paper in 2024, detailing our natural risk management approach. “Nature” herein refers to the dynamic complex and interactions of abiotic (land, oceans, freshwater, atmosphere, etc.) and biotic (plants and animals) components, as well as ecosystem services provided, including biodiversity balance and climate regulation.

## Reporting Time Frame

The report primarily covers the period from January 1, 2024, to December 31, 2024. For timeliness and continuity, some information disclosure is traced back to the past or appropriately extended to July 2025.

## Report Data Description

The data in this report is sourced from official documents, statistical reports, financial reports, and other information that has been collected, aggregated, and subjected to audit. Certain figures are presented as rounded values, and minor discrepancies may arise due to rounding adjustments. Unless specified otherwise, all monetary amounts in this report are denominated in RMB.

## Forward-Looking Statement

This report contains forward-looking statements. Forward-looking statements are inherently subject to risks and uncertainties, and actual outcomes may differ materially from those in forward-looking statements due to numerous factors. The forward-looking statements in this report are solely based on the assumptions, estimates, and predictions derived from the information available at the time of report preparation. The Company is under no obligation to update these statements at any time, except as required by law.

## Report Acquisition

This report is released in Simplified Chinese and English versions. In case of any discrepancy between the two versions, the Simplified Chinese version shall prevail. You can log on to the Company’s sustainability webpage ([www.jinkosolar.com/site/esg](http://www.jinkosolar.com/site/esg)) or contact us via [ESG@jinkosolar.com](mailto:ESG@jinkosolar.com) to obtain the electronic version of the Report and put forward relevant comments and suggestions.

## Reporting Organizational Boundary

The organizational scope of the information disclosed in this report covers Jinko Solar Co., Ltd. and its subsidiaries. The performance data in this report, unless otherwise specified, aligns in organizational scope with the 2024 consolidated financial statements.

## Normative References

- ◆ *Recommendations of the Taskforce on Nature-related Financial Disclosures (hereinafter referred to as the “TNFD Recommendations”)* published by the Taskforce on Nature-related Financial Disclosures (TNFD)
- ◆ *IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information* (hereinafter referred to as “IFRS S1”) and *IFRS S2 Climate-related Disclosures* (hereinafter referred to as “IFRS S2”) published by the International Sustainability Standards Board (ISSB)
- ◆ *GRI 101: Biodiversity 2024* (hereinafter referred to as “GRI 101”) under the *GRI Sustainability Reporting Standards* (GRI Standards) issued by the Global Sustainability Standards Board (GSSB)
- ◆ *Kunming-Montreal Global Biodiversity Framework* (hereinafter referred to as the “Kunming-Montreal Framework”) adopted at the 15th Conference of the Parties to the Convention on Biological Diversity (COP 15)
- ◆ *Exposure Draft to Chinese Sustainability Disclosure Standards for Business Enterprises No. 1 – Climate (trial)* (hereinafter referred to as “Climate ED”)

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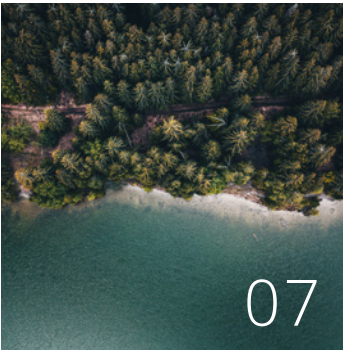
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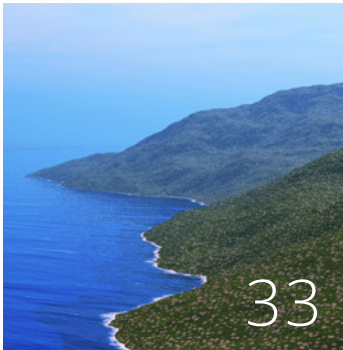
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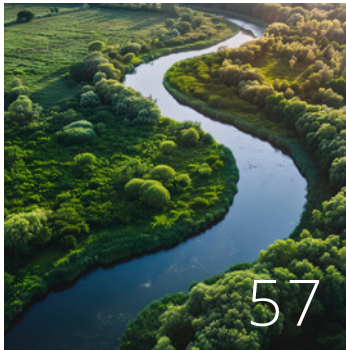
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01

Jinko



# Company Profile

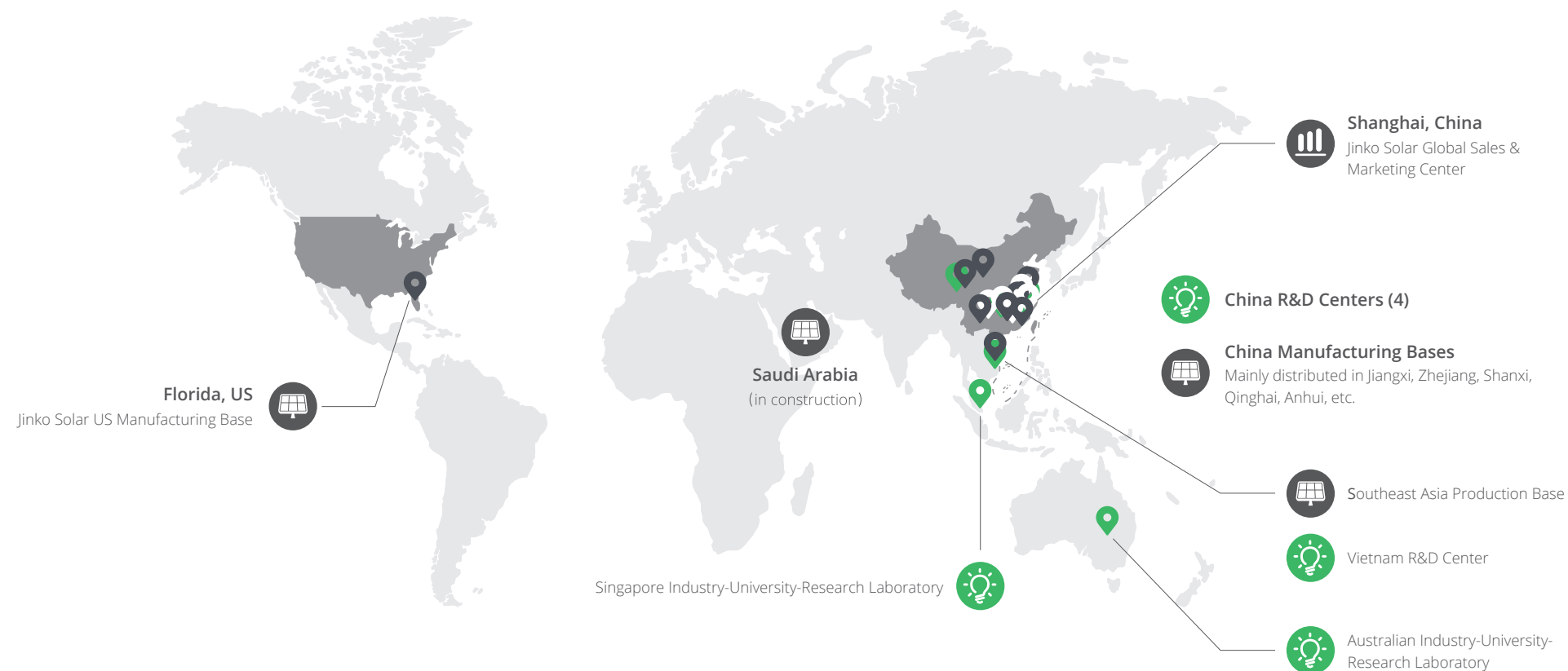
Jinko Solar Co., Ltd. (stock code: 688223) is a globally renowned and highly innovative PV-ESS technology company. With a strategic focus on core segments of the photovoltaic industry, the Company specializes in integrated R&D, manufacturing of photovoltaic products, as well as comprehensive clean energy solutions, leading sales across major global photovoltaic markets. By the end of the reporting period, the accumulated global shipments of modules of Jinko Solar have exceeded 300 GW, ranking as the global leader in module shipments for 6 times. Additionally, Jinko Solar is actively expanding into the field of energy storage system (ESS), and continuously developing integrated PV-ESS solutions to position itself as a global leading provider of integrated energy solutions.





# Business Layout

Jinko Solar continues to expand global production, logistics, sales, and service networks and pioneers the “vertical integration” capacity from silicon wafer and cell to module production in the industry, strengthening its global manufacturing and R&D capabilities. Our products serve about 200 countries and regions worldwide, catering to about 4,000 customers, with our N-type technology leading the industry in scale.



## Global Manufacturing

Jinko Solar pioneered the “vertical integration” capacity from silicon wafer and cell to module production in the industry. The Company owns more than 10 globalized manufacturing bases in China, the United States, Southeast Asia and the Middle East (in construction).

## Global R&D

Jinko Solar has global R&D capabilities, with R&D centers in Haining, Zhejiang Province, Shangrao, Jiangxi Province, Taiyuan, Shanxi Province, and Xining, Qinghai Province, as well as industry-academia-research joint R&D laboratories in Vietnam, Singapore and Australia, etc.

# Nature-Positive Strategy

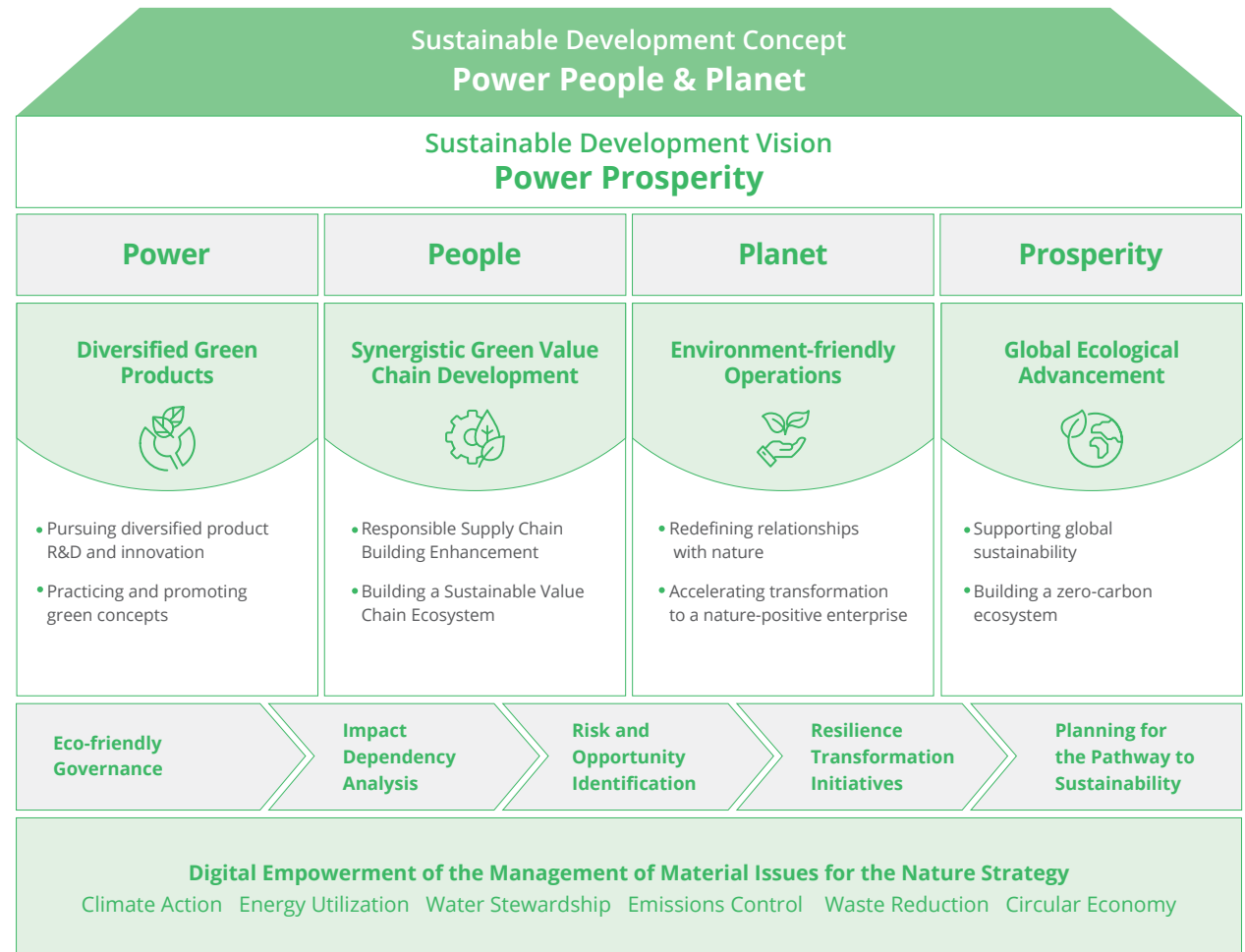
Human business activities inevitably have an impact on nature. Meanwhile, almost all corporate business and supply chains directly or indirectly depend on natural ecosystems and the services they provide. The World Economic Forum's *Global Risks Report 2025* shows that environmental issues such as extreme weather have indeed ranked among the top ten global risks for five consecutive years. Over the next decade, pollution, loss of biodiversity, and natural resource scarcity will be the most severe long-term challenges globally.

As a global enterprise, Jinko Solar embraces ecological responsibility and is guided by the value of becoming a nature-positive enterprise, focusing on the balanced interaction between production operations and natural ecological resources. The Company formulates and implements a multidimensional action plan encompassing operational management, value chain co-creation, solution development, and experience sharing. This initiative clarifies the positioning of value chain transformation, explores well-defined nature-positive business models, and establishes a virtuous cycle between natural resources and business development, ultimately pursuing future-oriented commercial prosperity.

During the reporting period, we actively identified the intrinsic value linkages between sustainable development strategy, our business scenarios, global energy transition, and nature-positive business models. This process enabled the upgrade of our original climate strategy roadmap into a natural strategy roadmap, now embedded within our sustainable development strategy. We intend to leverage this roadmap as a point of entry to share our thinking on contributing to global energy transition and co-creating a resilient future with more stakeholders.



## Jinko Solar's Nature Strategy Roadmap





# Performance Highlights

## Clean Technology Serving the Globe

**300+** GW

Global accumulated shipments of modules

**6** times

Topped global module shipments

**~200**

Countries and regions covered by sales network

**~4,000**

Global customers served

## Innovation-driven Empowerment

**2,993**

Accumulated patents granted

**1,981**

R&D team members

RMB **4.407** billion  
Invested in R&D

### Neo Green

Low-carbon product manufactured by "Zero-Carbon Factory"<sup>1</sup>

## Future-leading Green Products

**6**

RoHS certifications were obtained during the reporting period

**11**

Module products on sale pursued Life Cycle Assessment (LCA) certification

**5**

REACH certifications were obtained during the reporting period

**9**

Factories have earned "Zero-Carbon Factory" certifications

## Eco-friendly Coexistence

**243.7** MW

Cumulative installed capacity of rooftop PV system at manufacturing bases

**6,396,508.80** tons

Total recycled water usage

**164.4** thousand tons

General industrial solid waste recycled or reused

**112,782.37** MWh

Electricity saved through technical renovation projects

**27%**

Reduction in carbon emission intensity of self-operated facilities compared to the base year

RMB **256.9087** million

Total investment in energy conservation and environmental protection

RMB **930.3** thousand

Total investment in environmental publicity and education

**7.9878** million tons

Water saved through implementation of water-efficient production processes and projects

<sup>1</sup>"Zero-carbon Factory" refers to the factory certified under the *Evaluation Specification of Zero-Carbon Factory (T/CECA-G 0171-2022)*.



# Honors and Recognitions



Listed in  
"Forbes 2024  
China ESG 50"



Ranked on the 2024  
*Fortune* China 500 and  
China ESG Impact List



Recognized as a National  
Green Supply Chain  
Management Enterprise

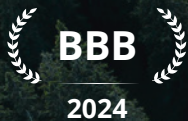


Selected as a leading practice  
case in the renewable energy  
value chain by the World  
Economic Forum



## MSCI ESG

Rated BBB for two consecutive years,  
maintaining industry leadership



## S&P CSA

Listed as the first and only module company in  
*S&P Global Sustainability Yearbook 2025*



## EcoVadis

Achieved EcoVadis Silver Medal at group level  
(top 7% of the industry)

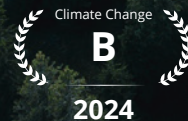


## CDP

Selected as Supplier Engagement Leader based on the Supplier  
Engagement Assessment (SEA) and joined the A-list, achieving  
three consecutive increases

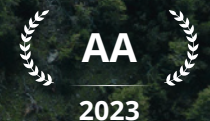


Maintained industry-leading CDP score with  
excellent climate governance



## Wind ESG

Ranked first in the industry, included in Wind's "ESG  
Best Practice Top 100"





# Eco-friendly Governance

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02





# Strengthening Governance Framework

Jinko Solar has established a natural strategy governance framework led by the Board of Directors. The framework includes the Strategy and Sustainable Development Committee, the Risk Compliance and ESG Management Committee and its Secretariat, and the Risk Compliance and ESG Management Working Group, which are responsible for the supervision and decision-making, coordination and advancement, as well as the execution of natural strategies, respectively. They jointly ensure the orderly progress of natural strategies and continuous performance improvement.

 <p><b>Decision Level</b></p>	<p><b>Board of Directors</b> It serves as the highest management and supervision body for corporate natural strategies.</p>	Responsible for reviewing the Company's natural strategy planning, objectives and their implementation progress, as well as the assessment results and management of dependencies, risks, and opportunities. The Strategy and Sustainable Development Committee meets at least once a year.
	<p><b>Strategy and Sustainable Development Committee</b> It represents the Board of Directors in the review and decision-making of corporate natural strategies.</p>	
 <p><b>Management Level</b></p>	<p><b>Risk Compliance and ESG Management Committee</b> It serves as the highest body for coordination and advancement of corporate natural strategies.</p>	Responsible for discussing and formulating action strategies, development goals, and institutional policies related to corporate natural strategies. Manage dependency analysis as well as risk/opportunity identification and countermeasures to promote the implementation of specific issues.
	<p><b>Secretariat of the Risk Compliance and ESG</b> It represents the Risk Compliance and ESG Management Committee in coordinating and advancing the execution of corporate natural strategies.</p>	
 <p><b>Execution Level</b></p>	<p><b>Risk Compliance and ESG Management Working Group</b> It serves as the execution body for corporate natural strategies.</p>	Responsible for promoting the execution of specific issues across business units of the Company, facilitating stakeholder engagement, identifying and reporting operational impacts, risks, and opportunities, and taking concrete actions to achieve specific management objectives for corresponding issues.

The Company actively set overall goals and requirements for the management of issues related to natural strategies. It incorporated sub-issue management objectives into annual performance evaluation system, linking them to employee incentives to ensure efficient achievement of management objectives for corresponding issues.

Taking climate change mitigation and adaptation as an example, the Company included relevant implementation indicators for this issue (such as the proportion of green electricity usage and energy consumption unit of product) in the annual performance evaluation system of executive management and employees in energy- and equipment-related positions to ensure the efficient achievement of climate governance objectives.

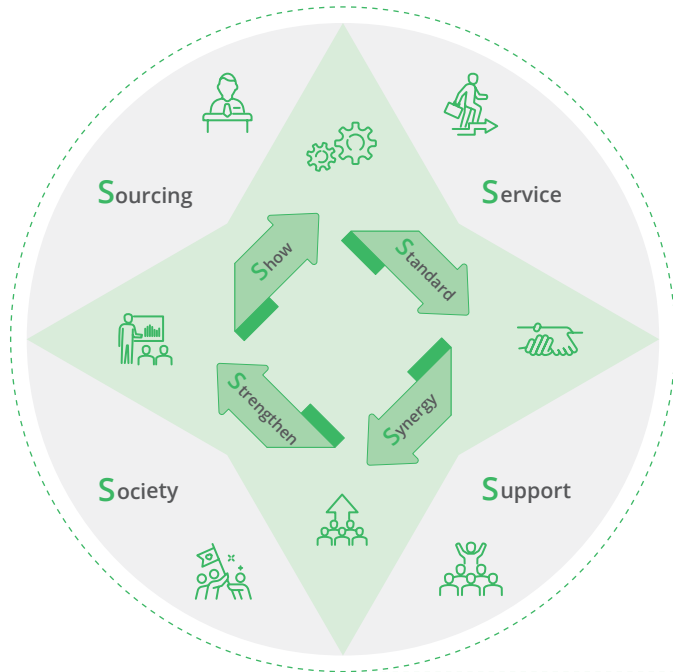
Executive Management	Employees at Relevant Positions
<p>The Remuneration and Evaluation Committee under the Board of Directors evaluates executive management and formulates annual pay and incentive plans based on key financial and operational indicators for the year, taking into account the achievement of management objectives for material issues.</p>	<p>The achievement of management objectives for material issues can have an impact on up to approximately 10% of the performance bonuses for employees in corresponding positions. If the objectives are not met, the specific impact on performance will be determined based on the degree of deviation from the objectives.</p>
	



# Consolidating Comprehensive Governance

## Management Empowerment

Jinko Solar continues to improve its nature-related risk governance framework and collaborates with internal teams to develop response measures. We actively demonstrate our influence by sharing management achievements and communicating our management philosophy and progress of issues related to natural strategies internally while effectively communicating our experience in natural strategy management externally. These efforts help mobilize stakeholders to jointly address challenges and contribute to sustainable development across the industrial ecosystem.



The Company has standardized its management system related to natural strategies by establishing and updating internal management systems including the *Energy Management Manual*, the *Energy Operation Control Procedures*, and the *Wastewater, Exhaust Gas, and Noise Management System*. These ensure standardized and well-documented practices for energy usage and management, as well as environmental compliance management. During the reporting period, we revised 11 internal policies solely in environmental management.

To effectively implement natural strategy objectives, the Company initiates lean management projects across departments focusing on energy saving, water conservation, and pollution reduction, delivering both ecological and additional economic benefits. During the reporting period, cross-departmental initiatives like water management and low-carbon management were successively implemented.

We promote company-wide participation in special empowerment programs for issues related to natural strategies to encourage the practice and communication of sustainable development concepts. During the reporting period, the Company organized dozens of comprehensive training sessions on natural strategies and progressively rolled out specific issue trainings across all functional departments. Additionally, the Jinko Solar Talent Online Platform launched sustainable development courses open to all employees for their voluntary participation.

The Company has established regular internal disclosure mechanisms for issues related to natural strategies. Through internal emails, internal communication platforms, and corporate culture interaction platforms, we actively share management concepts, methods, progress, and outcomes of these issues. This mobilizes more internal stakeholders to proactively participate in action plans on such issues.

Internal Empowerment

Standard

Synergy

Strengthen

Show

## External Communication

### Sourcing

By formulating our supplier ESG action plan following a “basic actions - expanded actions - key initiatives” framework, the Company collaborates with suppliers for sustainable development. We conduct supply chain empowerment actions through on-site visits, remote guidance, and specialized training. During the reporting period, the Company conducted several ESG-specific trainings for key suppliers and supply chain partners, with all 113 key suppliers actively participating.

### Service

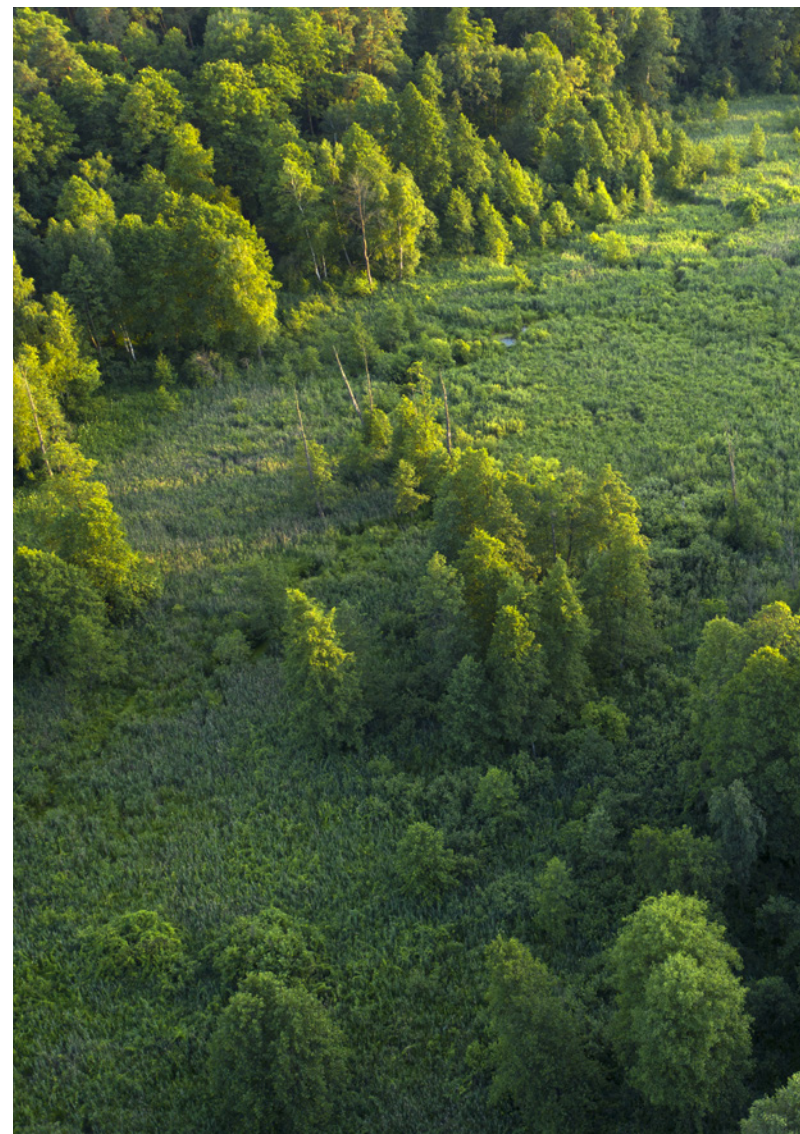
The Company integrates natural strategy concepts into full product lifecycle management, providing global customers with cost-effective, eco-friendly, and feasible integrated clean energy solutions through innovative solar-storage technologies and reliable products. Besides, the Company engages in efficient communication with customers and promptly responds to inquiries about the sustainable development concepts of products to help customers understand the inherent sustainable values of products.

### Support

Jinko Solar actively leverages its strengths to participate in major international exchange activities such as alliances, forums, and summits. By sharing insights and practical experiences related to natural strategies and specific issues, the Company enhances communication and collaboration with ecosystem partners and calls on global partners to take proactive actions for a fair, just, and affordable energy transition.

### Society

The Company actively promotes the concepts of climate change and environmental protection to the general public and collaborates with community partners to conduct a series of environmental education and themed public welfare activities. During the reporting period, Jinko Solar launched the inaugural “Zero-Carbon Visionaries - 2024 Jinko Solar Global Business & Technology Competition”, attracting over 100 teams from more than 80 top institutions worldwide.





## Digital and Real Economy Integration

Jinko Solar vigorously promotes digital strategies, and establishes “digital delivery of digitized products and services” as a core development goal. It fully accelerates digital transformation across the value chain, enabling end-to-end tracking and data interoperability to enhance collaboration efficiency.



Recognized as a National and Jiangxi Provincial “Digital Pilot” enterprise



Included in the *Collection of Typical Cases in National Manufacturing Digitalization*



Selected as a typical practical case of data element application scenarios in the national industrial field by the Ministry of Industry and Information Technology of the People's Republic of China

### Digital Strategy Model



### Full-Cycle Digital Management Process

<b>R&amp;D design</b>	Improvement of R&D testing efficiency	Promote the standardized management of R&D data and enhance testing capabilities and visualization by strengthening data linkage between product development and laboratory testing.
<b>Operation and maintenance (O&amp;M) management</b>	Smart O&M and energy management	Monitor and analyze electricity usage data of workshops and equipment in real-time by leveraging the digital platform of the energy management system to explore the potential for energy-saving in equipment and facilities.
	Low-carbon management platform building	Build a carbon management system to improve the accuracy and efficiency of carbon emission quantification and pass the conformity assessment conducted by the certification body.
<b>Manufacturing</b>	Digital operations and EHS data tracking	Deploy AI systems in key areas with early warning functions for extreme weather, fire safety, and special operations to support environmental data collection and aggregation. Develop an EHS information platform and launch a smart EHS assistant to enhance overall EHS management.
<b>Supply chain management</b>	Intelligent transformation across the entire value chain	Improve the utilization efficiency of pallets and warehouse space by introducing an advanced warehouse management system.
		Fully digitize global logistics operations for transparent logistics operation data tracking. Make order management, raw material procurement, assembly production, and transportation arrangements more intelligent to support virtual inventory management and inventory-in and -out suggestions.



## Focusing on “Smart Factory” to build green momentum for sustainable development

Jinko Solar's Shangrao Manufacturing Base is equipped with automated production lines for photovoltaic cells, nearly one kilometer in length, covering the entire production process from raw materials to finished products. This integrated production scenario maximizes the utilization efficiency of space, energy, and resource. In 2024, Jinko Solar's photovoltaic “Smart Factory” was featured in the CCTV program “Republic Review: Jiangxi Chapter”, showcasing Jinko Solar's outstanding achievements in smart manufacturing, green production, and technological innovation.



PV cell production  
**45** pieces/second



Smart sorting speed in the wafer workshops  
**166** pieces/minute



PV cell output  
**3.9** million pieces/day



Sorting efficiency approximately  
**5** times  
that of manual efficiency



## Jinko Solar's carbon management system has passed the dual conformity assessment certified to ISO 14064 and ISO 14067

To enhance the accuracy and efficiency of carbon emission quantification, Jinko Solar has focused on building a carbon management system. Based on internationally recognized greenhouse gas accounting standards and tailored to the PV industry, this system ensures the scientific rigor and consistency of carbon emission data through intelligent algorithms. At the organizational level, it achieves digital control of direct and indirect emissions (including purchased energy). At the product level, it establishes an environmental emission management system that spans the entire “cradle-to-grave” life cycle.

The carbon management system not only features advanced algorithms and architecture design but also enables in-depth data mining and analysis to generate visual reports. With its support, the Company accurately identifies energy-saving potential, optimizes operational processes, and develops scientific carbon reduction strategies to facilitate the achievement of sustainable development goals.

Thanks to its highly efficient and comprehensive carbon management capabilities, Jinko Solar's carbon management system has successfully passed the conformity assessment based on ISO 14064-1:2018 and ISO 14067:2018, emerging as the first carbon management system with dual-standard certification in the PV industry.

### Certificate

Reference Standard: **ISO 14067:2018**  
 Certificate No.: 87CM 2025 001  
 Report No.: 90164785 001  
 Certificate Holder: Jinko Solar Co., Ltd.  
 No. 1, Virgin Road, Economic Development Zone, Shangrao City, 334100 Jiangxi, P.R. China  
 Audit Scope: CAS Carbon accounting system - Product Carbon Footprint Accounting Module  
 https://carbon.jinkosolar.com  
 Audit Method: Document and platform review, interview, trial run, case studies of functionalities and onsite audit  
 Certificate Scope: Based on the information reviewed, the following framework, methodologies, functionalities and emission factor database sources have been verified:  
 - Framework, methodologies, functionalities  
 - Goal and scope  
 - Life cycle inventory analysis  
 - Life cycle impact assessment  
 - Life cycle interpretation  
 - Critical issues  
 - Emission factor database sources  
 - Database: Ecoinvent 3.9.13.10, ELCD 3.0, ELCD-China-ECER 3.0  
 - The electricity emission factor from Ministry of Ecology and Environment of China and Ecoinvent database  
 - Enabling customized emission factor extension function  
 Validity: The certificate only concludes the design and framework of mentioned platform are in conformity with relevant requirements of reference standards. The certified organization must accept and pass the regular surveillance to keep the certificate valid. The validity can be automatically using the QR code, or the QR code ID # [www.certinor.com](https://www.certinor.com)  
 The certificate is valid from 11/02/2025 to 10/02/2028.

London, 11/02/2025  
 Name: Paul Parker  
 Title: Global Technical Manager - Carbon  
 TÜV Rheinland UK Ltd.



### Certificate

Reference Standard: **ISO 14064-1:2018**  
 Certificate No.: 84CM 2025 001  
 Report No.: 90164785 001  
 Certificate Holder: Jinko Solar Co., Ltd.  
 No. 1, Virgin Road, Economic Development Zone, Shangrao City, 334100 Jiangxi, P.R. China  
 Audit Scope: GHG Management Platform - CAS Carbon accounting system - Organizational Carbon Accounting Module  
 https://carbon.jinkosolar.com  
 Audit Method: Document and platform review, interview, trial run, case studies of functionalities and onsite audit verified/validated in accordance with ISO 14064-1:2018  
 Certificate Scope: Based on the information reviewed, the following framework, methodologies, functionalities and emission factor database sources have been verified:  
 - Framework, methodologies, functionalities  
 - Goal and scope  
 - GHG inventory boundaries  
 - Emission factor database sources  
 - Database: CDP/PPC/Environment 3.10 / UK Government GHG Conversion Factors for Company Reporting  
 - The electricity emission factor from Ministry of Ecology and Environment of China  
 - Enabling customized emission factor extension function  
 Validity: The certificate only concludes the design and framework of mentioned platform are in conformity with relevant requirements of reference standards. The certified organization must accept and pass the regular surveillance to keep the certificate valid. This Statement is not valid without the full verification scope, objectives, criteria and conclusion available within the full verification report.

London, 11/02/2025  
 Name: Paul Parker  
 Title: Global Technical Manager - Carbon  
 TÜV Rheinland UK Ltd.





# Enhancing Management Resilience

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03



With our business focusing on clean energy solutions, we closely monitor the ecological impacts across our value chain, including production operations, product use, and service delivery. As a global PV-ESS leader, we integrate clean energy solutions with green development by incorporating considerations of nature into corporate strategy. Based on the LEAP framework recommended by TNFD, we identify, assess, and manage nature-related dependencies, impacts, risks, and opportunities. We conduct due diligence on nature-related issues to lay the foundation for fulfilling our environmental responsibilities and taking responsive actions.



## Jinko Solar Adopted the LEAP Approach for the Identification and Assessment of Nature-related Issues

### Scoping

A quick, high-level preliminary scan of internal and external data and reference sources to generate a hypothesis about the organisation's potential nature-related dependencies, impacts, risks and opportunities to define the parameters for a LEAP assessment and to ensure managers and the assessment team are aligned on goals and timelines.

#### Locate

The interface with nature

- L1** Span of the business model and value chain
- L2** Dependency and impact screening
- L3** Interface with nature
- L4** Interface with sensitive locations



#### Evaluate

Dependencies and impacts

- E1** Identification of environmental assets, ecosystem services and impact drivers
- E2** Identification of dependencies and impacts
- E3** Dependency and impact measurement
- E4** Impact materiality assessment



#### Assess

Risks and opportunities

- A1** Risk and opportunity Identification
- A2** Adjustment of existing risk mitigation and risk and opportunity management
- A3** Risk and opportunity measurement and prioritization
- A4** Risk and opportunity materiality assessment



#### Prepare

To respond and report

- P1** Strategy and resource allocation plans
- P2** Target setting and performance management
- P3** Reporting
- P4** Presentation



Engagement with indigenous peoples, local communities and affected stakeholders

Scenario analysis



# Impact Dependency Analysis

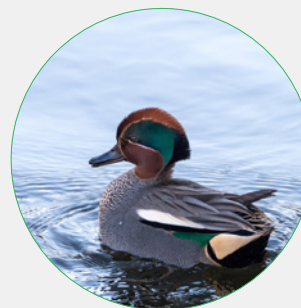
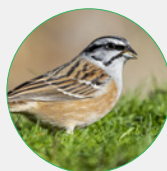
## Our Connections with Nature

Jinko Solar's primary business covers monocrystalline silicon rods, silicon wafer cutting, cell manufacturing, and module packaging in the photovoltaic sector. The Company supplies high-efficiency and high-quality solar modules and energy storage products to global customers, continuously delivering clean energy. Using the LEAP approach, we analyze geographic distributions of our operational sites and upstream/downstream value chain partners to conduct location-based assessments, identifying potentially ecologically sensitive priority areas. This lays the foundation for further determining the materiality of nature-related risks and opportunities and formulating risk management strategies.

### © Biodiversity-related Location Analysis

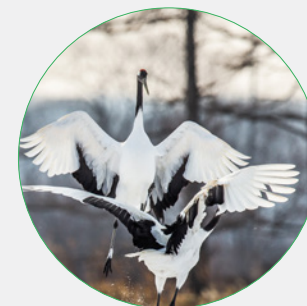
We prioritize biodiversity conservation by comprehensively evaluating ecological characteristics of our operational sites, surrounding areas, and locations of upstream and downstream value chain partners. Using biodiversity impact assessment (BIA)<sup>2</sup> tool and integrated biodiversity assessment tool (IBAT)<sup>3</sup>, we have conducted preliminary assessments of the distance between our production operations, our upstream and downstream partners, and key biodiversity areas. This helps us identify and evaluate potential risks and determine priority sites or regions requiring focused action.

**For our operating sites**, the Company has analyzed all manufacturing subsidiaries in operation at home and abroad (total 21 sites). The results show that 2 sites are within 5 km of endangered species habitats<sup>4</sup>, 9 sites are within 10 km of endangered species habitats, and no sites are within 10 km of protected areas<sup>5</sup>. We have identified the 2 operational sites within 5 km of key biodiversity areas as priority locations. Both sites are located in Zhejiang Province, with critical species in the vicinity including the black-faced spoonbill and red-footed falcon, among other bird species.



**For the operating sites of upstream suppliers**, the Company has assessed the biodiversity-related risks for key suppliers (total 72 sites) based on the supplier list. The results show that 17 sites are within 5 km of endangered species habitats, mostly in southern provinces (Zhejiang, Jiangsu, etc.), involving species such as the crested goshawk and peregrine falcon. No sites are within 10 km of protected areas.

Based on the biodiversity location analysis results, we will enhance environmental management measures at our own manufacturing facilities and supplier plants in key areas. This includes controlling pollutant emissions (e.g., exhaust gases and wastewater), continuously monitoring changes in surrounding aquatic and wetland ecosystems, and avoiding raw materials sourced from globally significant biodiversity sites.



<sup>2</sup> Biodiversity impact assessment (BIA): A tool developed by Shan Shui Conservation Center and Peking University Center for Nature and Society for assessing biodiversity impacts. <https://bia.hinature.cn/#/>.

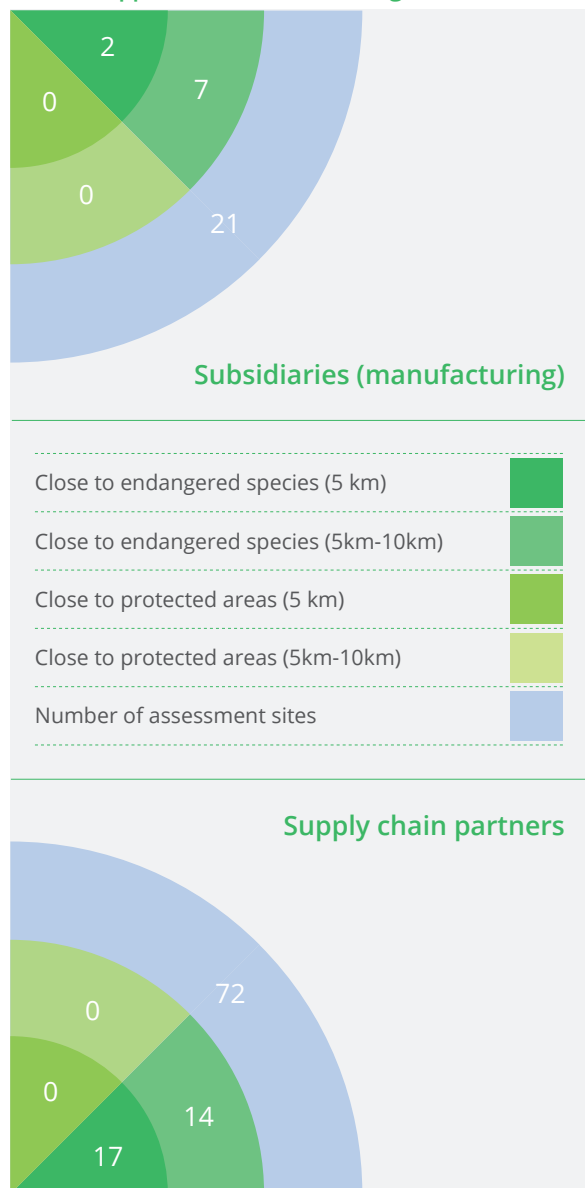
<sup>3</sup> Integrated biodiversity assessment tool (IBAT): Developed by the IBAT Alliance (including Birdlife International, Conservation International, the International Union of Conservation for Nature (IUCN), and the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC)), it provides access to data from three major global biodiversity databases to assess the proximity of project sites to important conservation sites for endangered species. <https://www.ibat-alliance.org/>.

<sup>4</sup> Species listed in the endangered category of IUCN or RCB, or included in the National Key Protected Wild Animal List are included in the statistical scope of endangered species.

<sup>5</sup> Protected areas listed in the World Database on Protected Areas (WDPA) are included in the statistical scope.



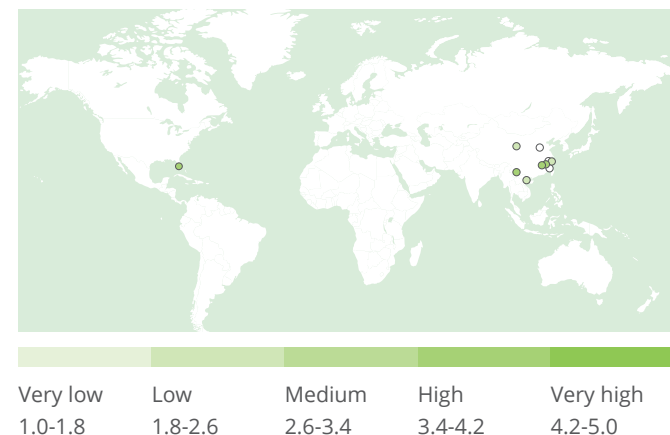
## Biodiversity Location Assessment Results for Operation Sites of Suppliers and Manufacturing Facilities



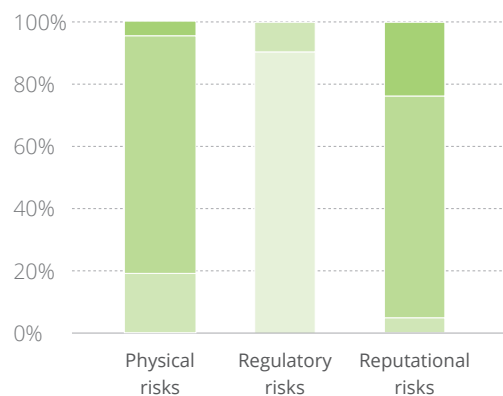
## © Water-related Location Analysis

Using the Water Risk Filter developed by the World Wildlife Fund (WWF), we have assessed our domestic and overseas manufacturing subsidiaries from three dimensions: physical risk<sup>6</sup>, regulatory risk<sup>7</sup>, and reputational risk<sup>8</sup>. This includes 12 risk items such as water availability, ecosystem service status, water scarcity, flooding, and water quality. We continuously advance the formulation of corresponding water management strategies and plans to improve the lean management of water.

## Physical Distribution of Water Risks at Manufacturing Facilities



## Water Risk Identification Results Based on Manufacturing Facilities



	Very low (1.0-1.8)	Low (1.8-2.6)	Medium (2.6-3.4)	High (3.4-4.2)	Very high (4.2-5.0)
Physical risks	0	4	16	1	0
Regulatory risks	19	2	0	0	0
Reputational risks	0	1	15	5	0

<sup>6</sup>Physical risk represents both natural and human-induced conditions of river basins, accounting for if water is too little, too much, unfit for use, and/or the surrounding ecosystems are degraded, and in turn, negatively impacting water ecosystem services.

<sup>7</sup>Regulatory risk is heavily tied to the concept of good governance and that businesses thrive in a stable, effective, and properly implemented regulatory environment.

<sup>8</sup>Reputational risk represents stakeholders' and local communities' perceptions on whether companies conduct business sustainably or responsibly with respect to water. While a considerable amount of reputational water risk is operational, there are some basin pre-conditions that make reputational water risk more likely to manifest.



## Impact of Nature on Us

Based on its business operations and the operational characteristics of upstream suppliers and downstream customers, Jinko Solar utilizes the ENCORE database<sup>9</sup> to evaluate the dependencies and impacts on nature across its entire value chain. This analysis helps to examine our interactions with nature and generate a materiality heatmap, laying a foundation for identifying potential material risks related to natural dependencies and impacts.

Through a combination of ENCORE database queries, product Life Cycle Assessment (LCA), desktop research, and internal/external interviews, our evaluation indicates that most natural dependencies and impacts across the value chain are at low to medium levels of materiality. Potential material natural dependencies and impacts are primarily associated with water and soil functions, climate change, and pollutant emissions:

### Dependency materiality



### Impact materiality



<sup>9</sup> Exploring natural capital opportunities, risks and exposure (ENCORE), a recommended tool under the TNFD framework, was jointly developed by the United Nations Environment Programme World Conservation Monitoring Centre (WCMC) and the Natural Capital Finance Alliance. It aggregates global data on nature-related risks to assist corporate assessments. <https://encorenature.org/en>.

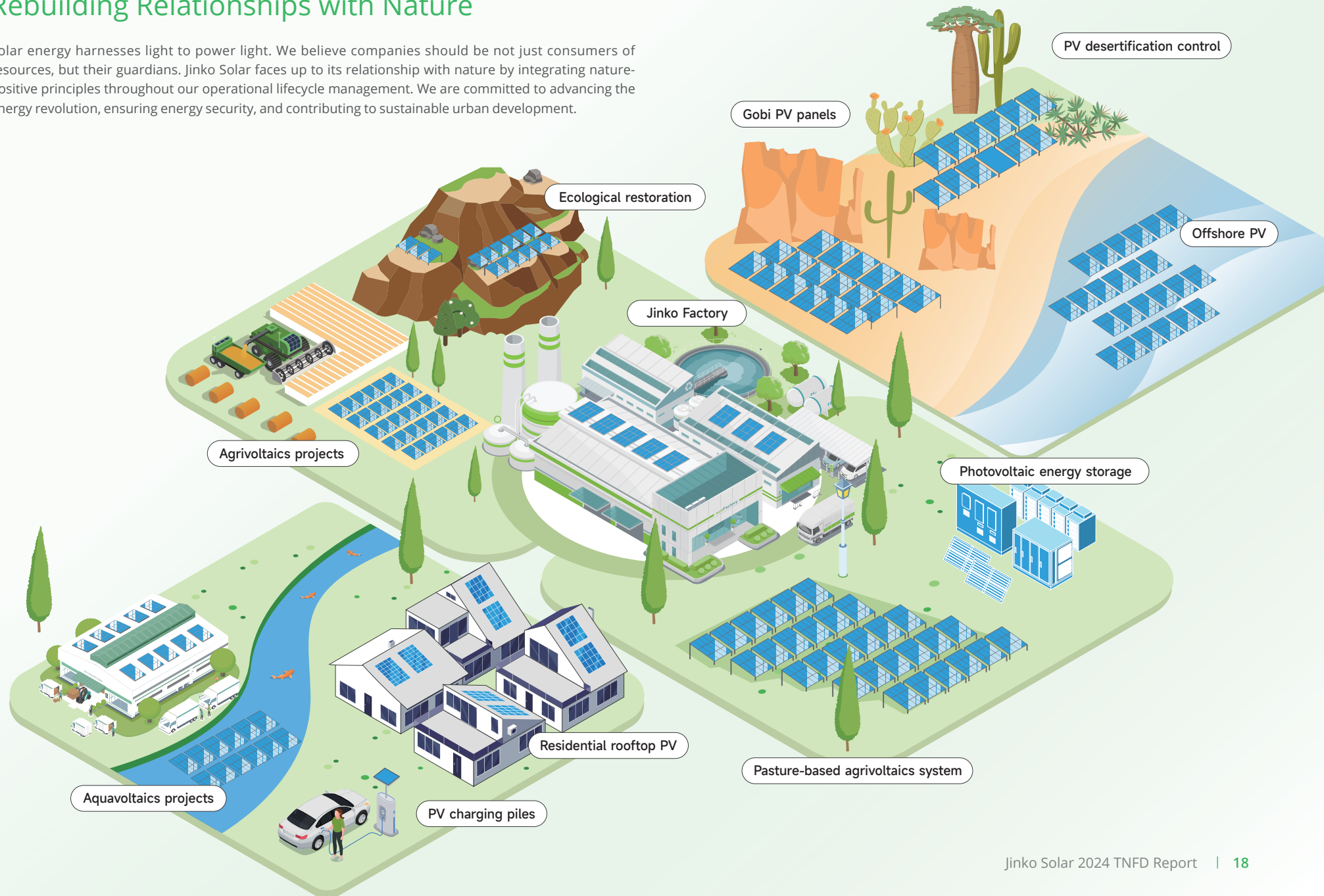
Dependencies/Impacts		Upstream	Own production and operations	Downstream
Dependencies	Water access			
	Global climate regulation			
	Regional climate regulation			
	Soil and sediment retention			
	Runoff regulation			
	Flood prevention			
	Storm protection			
	Land use			
	Noise attenuation			
Impacts	Disturbance			
	Waste generation and emissions			
	Water consumption			
	Global warming			
	Non-GHG air pollutant emissions			

Nature-related Dependency and Impact Heatmap



## Rebuilding Relationships with Nature

Solar energy harnesses light to power light. We believe companies should be not just consumers of resources, but their guardians. Jinko Solar faces up to its relationship with nature by integrating nature-positive principles throughout our operational lifecycle management. We are committed to advancing the energy revolution, ensuring energy security, and contributing to sustainable urban development.





# Risk and Opportunity Management

## Scenario Analysis

Jinko Solar employs a combination of qualitative assessment and quantitative analysis to conduct scenario analysis in accordance with the TCFD recommendations. This approach integrates the Company's adaptation plans and actions to comprehensively consider the impacts after taking response measures. Specifically, we qualitatively assess the severity of physical risks and quantitatively analyze the potential exposure and financial impacts of various physical risks. For transition risks related to policies and regulations, we simultaneously conduct qualitative pathway analysis and quantitative carbon reduction cost estimation. Based on simulating the Company's carbon reduction trajectory, we evaluate the financial impacts of the low-carbon trend on the Company. We refer to publicly available scenario information from international authoritative institutions (including *IPCC Sixth Assessment Report*, *IEA World Energy Outlook 2023*, etc.), selecting different levels of physical and transition risk scenarios. Based on climate scenario conditions, policy plans, and corporate targets, we determine the input parameters and time horizons to analyze potential material climate change impacts across different timescales.

Table of Scenario Parameters

Time horizon	Short-term: 1-3 years; medium-term: 3-5 years; long-term: 5-10+ years				
Scenario name	Physical risks		Transition risks		
	IPCC RCP2.6	IPCC RCP8.5	IEA's Net Zero Emissions by 2050 Scenario (NZE 2050)	IEA's Announced Pledges Scenario (APS)	IEA's Stated Policies Scenario (STEPS)
Temperature increase (compared to pre-industrial levels by 2100)	< 2°C	> 4°C	< 1.5°C	~ 1.7°C	~ 2.6°C
Description	This scenario projects that the world will take strict climate mitigation actions, holding the increase in global temperature to below 2°C by 2100.	This scenario assumes that the world continues to emit greenhouse gases at the current rate, with business as usual, resulting in a global temperature rise exceeding 4°C by 2100.	This scenario demonstrates an achievable pathway for the global energy sector to reach net-zero CO <sub>2</sub> emissions by 2050, without relying on emission reductions from sectors beyond energy to meet its targets.	This scenario assumes that all climate commitments made by governments worldwide, including Nationally Determined Contributions (NDCs) and long-term net-zero targets, will be fully implemented on schedule.	This scenario evaluates existing specific policies and announced policies by global governments on a case-by-case basis, projecting the potential development trajectory of the energy system assuming no additional policies are introduced.
Key assumptions	Given data availability, we limit the financial impact assessment of physical risks to the asset value dimension, temporarily excluding other transmission mechanisms such as operational disruptions and efficiency declines, to ensure clear boundaries for the risk quantification model and verifiable conclusions.		We assume that the Company will implement its carbon reduction targets at an average reduction rate in the future, and that external carbon tax policies are well-established and the carbon market trading mechanism is effectively and fully operational, thereby serving as a proxy for corporate carbon reduction costs.		



# Risk and Opportunity Identification

## ☉ Physical Risk Analysis

Based on physical risks and scenario selection, we focus on conducting location-based scenario analysis for all manufacturing subsidiaries in operation, comprehensively calculating asset exposure under different physical risks and assessing the potential financial impact. Parameters used in the analysis include:

### Frequency or intensity indicators related to various physical risks

Referencing climate data from international authoritative institutions such as the sixth phase of the Coupled Model Intercomparison Project (CMIP6), National Aeronautics and Space Administration (NASA), and the World Resources Institute (WRI), such as runoff depth, cyclone frequency, and heavy rainfall intensity.

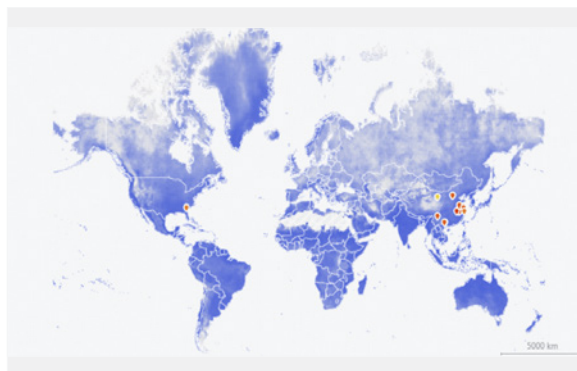
### Business activities and geographical locations of each manufacturing subsidiary

Used to assess the sensitivity of individual subsidiaries to different climate risks.

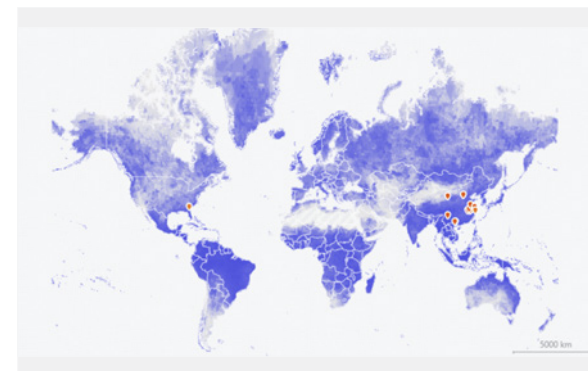
### Asset value of manufacturing subsidiaries

Comprehensively evaluate the scale of assets exposed to specific risks based on operational locations across different risk levels.

The analysis reveals that Jinko Solar's primary physical risks under baseline scenarios are extreme precipitation, humid trends, and cyclones, with a notable portion of its assets remaining exposed to high-risk areas for these hazards under the RCP8.5 scenario. Site-level assessment shows subsidiaries exposed to these three climate risks are predominantly located in China's Jiangxi and Zhejiang provinces, as well as Southeast Asia. Currently, Jinko Solar has established comprehensive physical risk emergency response mechanisms across all operational sites to enhance climate resilience. Specific contingency plans for extreme weather events such as floods, typhoons, and hurricanes have been implemented at high-risk locations. In 2024, no manufacturing base suffered significant financial losses due to such physical risks.



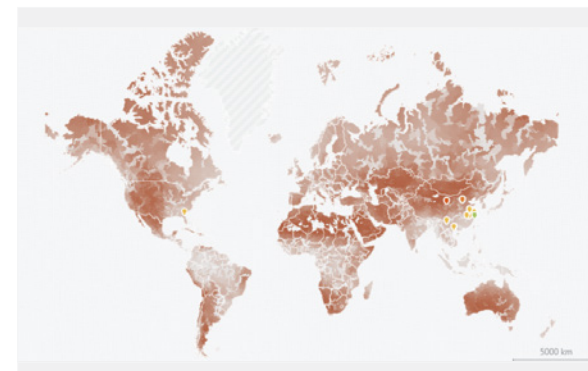
Risk Distribution of Extreme Precipitation Under 2050 RCP8.5 Scenario



Risk Distribution of Humid Trend Under 2050 RCP8.5 Scenario



Risk Distribution of Cyclone Under 2050 RCP8.5 Scenario



Risk Distribution of Water Shortage Under 2050 RCP8.5 Scenario

## © Transition Risk Analysis

Aligning with its dual-carbon goals and transition plan, the Company has adopted the International Energy Agency's (IEA) Net-Zero Emissions by 2050 Scenario (NZE) as the low-emission scenario, the Announced Pledges Scenario (APS) as the intermediate scenario, and the Stated Policies Scenario (STEPS) as the high-emission scenario to assess potential transition risks under Jinko Solar's transition pathway. This analysis serves as a reference for the Company's carbon reduction strategies and resource allocation. Parameters incorporated in the analysis include:

### The Company's greenhouse gas emissions

Based on the Company's reduction targets, linear projection is conducted using the 2024 greenhouse gas emissions data (Scope 1, Scope 2).



### The Company's financial data

Used to compare against the costs paid by the Company for additional carbon reductions, evaluating the financial impact of transition risks on the Company.



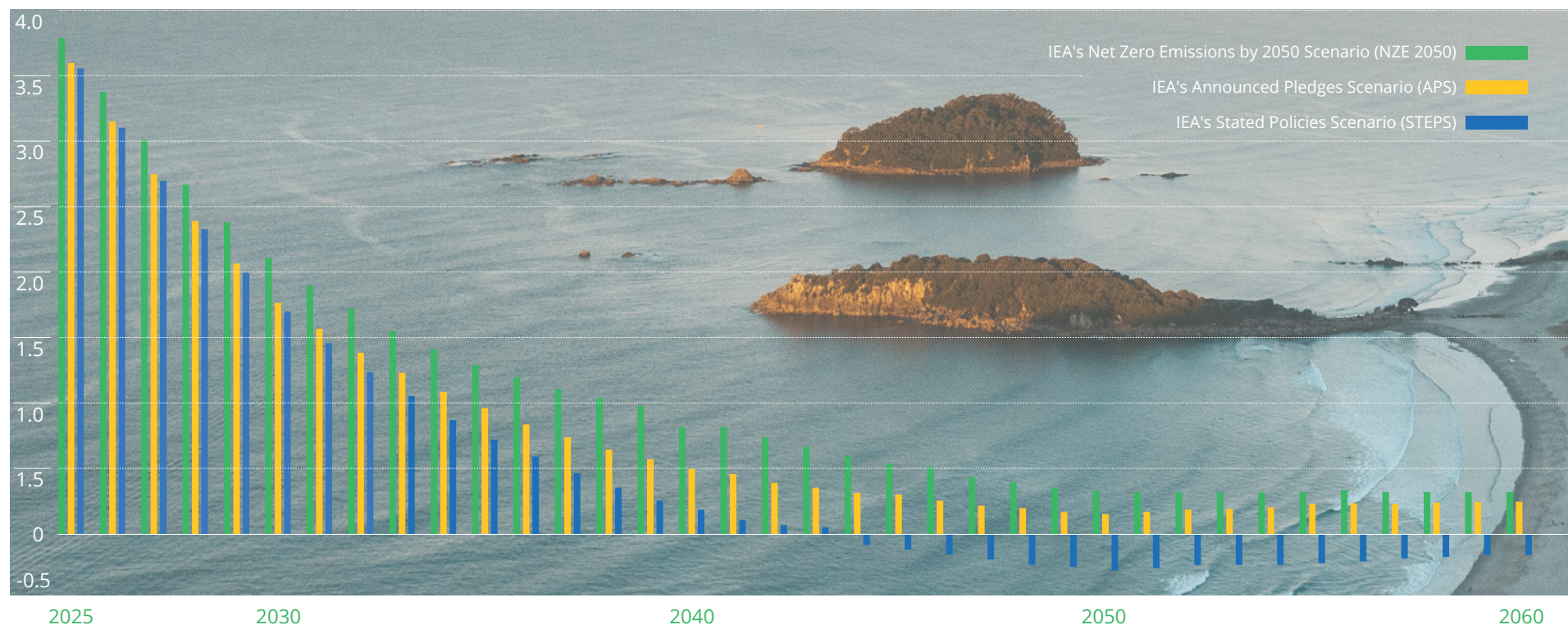
### Public scenario parameters

Industry carbon budgets and scenario-based carbon prices (market-based, not reflecting actual marginal carbon reduction costs).



## Additional Carbon Reductions Under IEA's Different Climate Scenarios

Unit: MtCO<sub>2</sub>e





IEA Climate Scenarios	Scenario Type	Cumulative Carbon Budget <sup>10</sup> (MtCO <sub>2</sub> e)	Cumulative Additional Carbon Reductions Required <sup>11</sup> (MtCO <sub>2</sub> e)	2050 Climate Value-at-Risk <sup>12</sup> of Transition Risk (CVaR, %)
IEA's Net Zero Emissions by 2050 Scenario (NZE 2050)	Low emissions	6.17	35.87	0.0044
IEA's Announced Pledges Scenario (APS)	Intermediate emissions	13.95	28.09	0.0017
IEA's Stated Policies Scenario (STEPS)	High emissions	20.61	21.42	0.0010

The analysis results show that based on the Company's reduction targets, Jinko Solar is supposed to achieve a certain amount of additional carbon reductions under all three climate transition scenarios, and may incur additional carbon reduction costs<sup>13</sup>. However, the Company's annual carbon reduction targets and associated additional carbon reduction costs decline progressively, with the CVaR showing a similar downward trend. In the long term, as the carbon targets are achieved, the Company's potential additional carbon reduction costs approach

zero, with almost no negative impact on corporate value. In the short to medium term, the Company needs to actively promote reduction actions, increase related investments in equipment updates, technological innovation, management optimization, and capacity building, which may result in high additional carbon reduction costs, but the financial impact is within an acceptable range. Under the NZE 2050 low-emission scenario, the Company needs the highest additional carbon reductions and carbon reduction costs to cope with transition risks and

meet reduction compliance requirements. Yet the impact on the corporate value<sup>14</sup> in 2050 will be only 0.0044%, not triggering the material risk threshold for financial planning decisions. Additionally, under the Stated Policies Scenario (STEPS), there will emerge a surplus carbon budget after 2043, and the Company will not incur additional carbon reduction costs.

<sup>10</sup> Carbon budget: Refers to the allowable emissions for the Company in each year from the current year to 2050 under a specific climate scenario.

<sup>11</sup> Additional carbon reduction required: Refers to the additional carbon emission reduction required by the Company to limit its carbon emissions below the carbon budget under a certain carbon reduction path. If the value has a negative measure, it indicates that the Company's carbon emissions are below the carbon budget and the carbon budget is in surplus, so no additional reduction is needed.

<sup>12</sup> Climate Value-at-Risk: Refers to the ratio of discounted carbon costs to corporate value over a specific period, used to represent policy-related risks' impact on corporate valuation.

<sup>13</sup> Additional carbon reduction costs: Refers to the costs paid by the Company to reduce carbon emissions exceeding carbon budgets. This indicator is predicted and estimated based on carbon price data under different scenarios and does not represent the Company's actual additional reduction expenditure. We assume that external carbon pricing mechanisms will become effective and fully operational by 2050, thereby serving as a proxy for corporate carbon reduction costs.

<sup>14</sup> Corporate value calculation: Corporate Value = (Market Capitalization + Debt + Minority Interests + Preferred Stock) - (Cash and Cash Equivalents).

## © Transition Opportunity Analysis

Aligned with our core business, we focus on leveraging climate change-driven growth opportunities in the photovoltaic market. Using the same IEA transition scenarios from our transition risk analysis, we project future PV module demand growth across three scenarios to model business expansion potential under different energy transition pathways<sup>15</sup>.

IEA's analysis and projections show that in the short to medium term, the PV market is experiencing a rapid growth trend. Before 2030, the compound annual growth rate of PV installations under the three IEA climate scenarios is higher than 20%, indicating that the sales potential of PV modules is relatively large. By 2030, the PV market opportunity is expected to grow

the most significantly, with market demand potentially exceeding the average level of baseline forecasts. In the long term, although the growth rate of PV market demand slows down, the total sales volume of PV modules remains elevated. Notably, under the both NZE 2050 and APS, the potential sales volume of PV modules from 2038 to 2050 is still relatively high.

### PV Module Sales Growth Opportunity Analysis







<sup>15</sup> Analysis assumptions: The Company's production capacity can be flexibly allocated and matched with downstream demand growth in a timely manner. In the analysis, factors not directly related to climate, such as uncertainties in product export market access caused by changes in the global trade situation, are not included in the scenario analysis.



# Risk and Opportunity Assessment

Jinko Solar integrates nature-related dependencies and impacts to identify potential risks and opportunities in its own operations and upstream and downstream business activities. Guided by TNFD recommendations, we systematically evaluate both acute and chronic physical risks, as well as transition risks related to policy and law, market, technology, regulation, and reputation. We refine the assessment of the impact of these risks and opportunities on the Company from multiple perspectives, including likelihood of occurrence, time horizon, level of impact, value chain stage, and financial impact. This assessment lays the foundation for us to take reasonable business planning and resource allocation.

## Risk and Opportunity Assessment Factors

<b>Time horizon</b> 	<ul style="list-style-type: none"> <li>Short-term (1-3 years): Align with corporate development plans, with annual tracking and review of nature and climate goal achievement</li> <li>Medium-term (3-5 years): Align with corporate decarbonization strategies and coincide with national carbon peaking goals achievement</li> <li>Long-term (5-10+ years): Align with corporate net-zero Science Based Targets (SBTs) and coincide with national carbon neutrality goals achievement</li> </ul>
<b>Analysis boundary</b> 	<ul style="list-style-type: none"> <li>Upstream value chain: Production and transportation of raw materials like silicon</li> <li>Own production and operations: Manufacturing of PV modules and construction of solar-storage systems</li> <li>Downstream value chain: Logistics of components, construction and operations of PV power stations</li> </ul>
<b>Likelihood</b> 	<ul style="list-style-type: none"> <li>Assess the future probability of relevant risks or opportunities based on historical frequency, scenario analysis, and internal/external research and discussions</li> </ul>
<b>Level of impact</b> 	<ul style="list-style-type: none"> <li>Assess the level of impacts by considering the types of impacts, how they occur, and the severity or scale of the consequences brought about by the relevant risks or opportunities</li> </ul>



## Physical Risks

Physical risk type	Impact pathway of risks	Likelihood of occurrence	Time horizon of impact	Level of impact	Value chain stage	Financial impact
Acute risks	<b>Heat wave</b> <ul style="list-style-type: none"> <li>Outdoor work or commuting may lead to heatstroke, having negative impacts on production and revenue.</li> <li>Potential increased use of refrigerants raises operational costs.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Medium-term</li> <li>Long-term</li> </ul>	Low	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased operational costs</li> </ul>
	<b>Extreme precipitation</b> <ul style="list-style-type: none"> <li>Production disruptions and delayed product deliveries may occur, affecting business continuity and causing reduced corporate revenue.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Short-term</li> <li>Medium-term</li> <li>Long-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Upstream value chain</li> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Decreased revenue</li> </ul>
	<b>Cyclones/ Typhoons/ Hurricanes</b> <ul style="list-style-type: none"> <li>Production equipment, buildings, and other physical assets may sustain damage, leading to production halts, upstream and downstream supply chain disruptions, repair costs, and expenses for equipment replacement.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Short-term</li> <li>Medium-term</li> <li>Long-term</li> </ul>	High	<ul style="list-style-type: none"> <li>Upstream value chain</li> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Asset value loss</li> <li>Increased operational costs</li> <li>Decreased revenue</li> </ul>
	<b>Flooding</b> <ul style="list-style-type: none"> <li>Flooding or water ingress into factories and production areas may render equipment inoperable and halt certain processes, reducing production capacity.</li> <li>Damage to surrounding transportation infrastructure, such as roads and bridges, may prolong upstream and downstream logistics and product delivery times, negatively impacting revenue.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Medium-term</li> <li>Long-term</li> </ul>	High	<ul style="list-style-type: none"> <li>Upstream value chain</li> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Asset value loss</li> <li>Increased operational costs</li> <li>Decreased revenue</li> </ul>
	<b>Cold wave/ Frost</b> <ul style="list-style-type: none"> <li>Demand and usage for heating energy may increase, resulting in higher production costs and operating expenses.</li> </ul>	Unlikely	<ul style="list-style-type: none"> <li>Short-term</li> </ul>	Low	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased production costs</li> <li>Increased operational costs</li> </ul>



## Physical Risks

Physical risk type	Impact pathway of risks	Likelihood of occurrence	Time horizon of impact	Level of impact	Value chain stage	Financial impact
Chronic risks	<p><b>Water shortage</b></p> <ul style="list-style-type: none"> <li>Water shortage can drive up water prices, necessitating elevated water expenditures for manufacturing processes, thereby increasing production and operating costs.</li> <li>Water shortages can halt production, which in turn affects output and revenue.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Long-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Upstream value chain</li> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased production costs</li> <li>Increased operational costs</li> <li>Decreased revenue</li> </ul>
	<p><b>Increased ecosystem vulnerability</b></p> <ul style="list-style-type: none"> <li>The large-scale manufacturing can exacerbate habitat fragmentation, affecting species migration. The Company may need to bear the costs of ecological restoration.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Medium-term</li> <li>Long-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased operating costs</li> </ul>
	<p><b>Land use change</b></p> <ul style="list-style-type: none"> <li>Changes in land use could result in the modification or termination of PV projects, negatively affecting PV module sales.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Long-term</li> </ul>	Low	<ul style="list-style-type: none"> <li>Downstream value chain</li> </ul>	<ul style="list-style-type: none"> <li>Decreased revenue</li> </ul>
	<p><b>Pollution</b></p> <ul style="list-style-type: none"> <li>If emissions of air pollutants, wastewater, or solid waste are not effectively controlled, ecosystem services may deteriorate. Ongoing corporate investment in pollution control is required to minimize negative environmental impacts.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Short-term</li> <li>Medium-term</li> <li>Long-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased operating costs</li> </ul>

## Transition Risks

Transition risk type		Impact pathway of risks	Likelihood of occurrence	Time horizon of impact	Level of impact	Value chain stage	Financial impact
Policy	 Carbon emission policies and policy changes	<ul style="list-style-type: none"> <li>Inadequate corporate governance or failure to meet existing regulatory requirements may expose the Company to risks such as fines, production restrictions, and other penalties. In addition, as countries continue to strengthen climate actions, stricter carbon emission regulations and carbon pricing mechanisms may be introduced. This trend would necessitate greater corporate investment in energy conservation and emission reduction efforts, driving up operational costs associated with reducing greenhouse gas emissions.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Medium-term</li> <li>Long-term</li> </ul>	High	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased operational costs</li> </ul>
	 Exposure to sanctions and litigation	<ul style="list-style-type: none"> <li>As governments and regulatory bodies tighten environmental policies, covering land use restrictions, protected area boundaries, biodiversity-sensitive zones, water use limitations, pollutant discharge standards, and hazardous waste treatment requirements, the Company needs to enhance investment in pollution control measures to improve environmental compliance management.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Medium-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased operational costs</li> </ul>
Technology	 Unsuccessful investment in new technologies	<ul style="list-style-type: none"> <li>The accelerated pace of technological innovation and product iteration in the PV industry imposes greater demands on corporate R&amp;D capabilities. Failure to accurately anticipate industry trends may result in technological obsolescence, loss of market share, and declining revenue.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Medium-term</li> <li>Long-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Decreased revenue</li> </ul>
	 Transition to lower water intensity and carbon emissions technologies	<ul style="list-style-type: none"> <li>The early retirement or elimination of existing low-efficiency, high-carbon, high-energy-consuming equipment and assets can result in asset impairment losses. The application of new technologies involves technological investment costs and the economic feasibility of the technologies needs to be taken into account.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Medium-term</li> </ul>	Low	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Asset value loss</li> <li>Increased operational costs</li> </ul>
Markets	 Changing customer behavior	<ul style="list-style-type: none"> <li>Downstream customers are increasing certification requirements, such as product carbon footprint certifications, low-carbon product certifications, etc. Without these certifications, companies may experience shrinking market share and lower revenue.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Short-term</li> <li>Medium-term</li> <li>Long-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Own production and operations</li> <li>Downstream value chain</li> </ul>	<ul style="list-style-type: none"> <li>Decreased revenue</li> </ul>
Reputation	 Negative stakeholder feedback	<ul style="list-style-type: none"> <li>Regulators, investors, customers, and other stakeholders increasingly prioritize corporate environmental performance. Poor environmental governance and ecological protection management may damage corporate reputation, affecting financing and market capitalization. Besides, it also increases compliance costs for maintaining or enhancing corporate reputation.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Medium-term</li> <li>Long-term</li> </ul>	High	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Higher credit risks</li> <li>Increased operational costs</li> </ul>



## Transition Opportunities

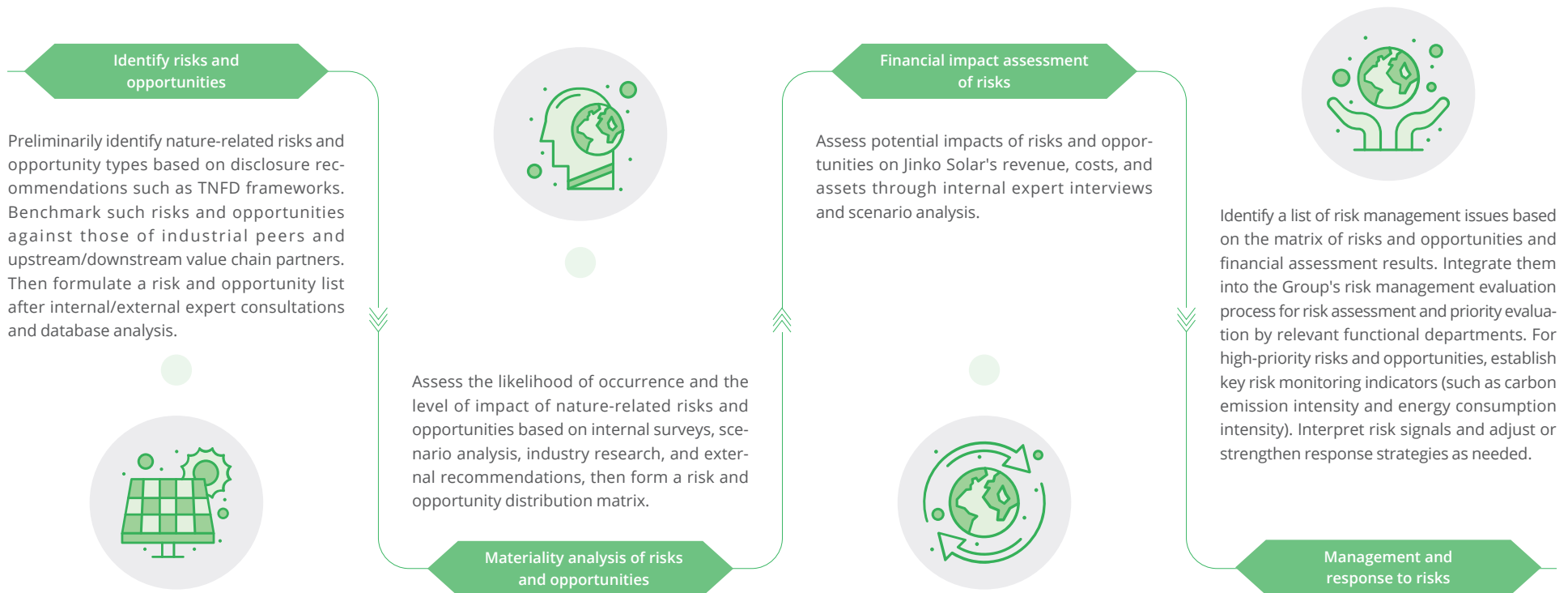
Transition opportunity type	Impact pathway of risks	Likelihood of occurrence	Time horizon of impact	Level of impact	Value chain stage	Financial impact
Energy source	<p><b>Use of low-carbon energy sources</b></p> <ul style="list-style-type: none"> <li>By leveraging our industrial strengths, the deployment of distributed PV and other renewable energies can reduce the Company's dependence on traditional fossil fuels. This lowers the cost of purchased energy, helping to save on energy expenditures and other operational costs.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Short-term</li> <li>Medium-term</li> <li>Long-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Decreased operational costs</li> </ul>
Resource efficiency	<p><b>Use of new technologies such as digital management</b></p> <ul style="list-style-type: none"> <li>Integrating digital technologies (IoT, GIS, AI, big data, etc.) with production and operations can promptly identify high-energy-consuming and high-emission production processes and take measures to reduce energy waste. This lowers energy expenditures while improving data accessibility and data quality, which is beneficial for companies to conduct nature-related assessments.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Short-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Decreased operational costs</li> </ul>
Products and services	<p><b>Development and/or expansion of low-carbon products and services</b></p> <ul style="list-style-type: none"> <li>Responding to customers' low-carbon requirements for products, conducting product life cycle assessments (LCAs) to evaluate their environmental impacts, and managing carbon footprints across key product life cycles can ensure products have a low-carbon advantage while creating growth potential for business performance.</li> <li>The development of energy storage and other low-carbon energy technologies, combined with integrated photovoltaic module advantages, facilitates the creation of business models like "PV + Storage". These models align with market demands under green energy transition and power market reform trends, establishing new growth drivers.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Short-term</li> <li>Medium-term</li> <li>Long-term</li> </ul>	High	<ul style="list-style-type: none"> <li>Upstream value chain</li> <li>Own production and operations</li> <li>Downstream value chain</li> </ul>	<ul style="list-style-type: none"> <li>Increased revenue</li> </ul>
Markets	<p><b>Expansion into new markets</b></p> <ul style="list-style-type: none"> <li>The global energy mix transformation provides huge market opportunities for PV products. Emerging markets are transitioning from fossil fuels to renewable energy. With population growth and economic development, the demand for new energy may continue to increase, offering new market opportunities for the Company.</li> </ul>	Likely	<ul style="list-style-type: none"> <li>Medium-term</li> <li>Long-term</li> </ul>	High	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased revenue</li> </ul>
Reputation	<p><b>Environmental reputation</b></p> <ul style="list-style-type: none"> <li>The Company's innovations and initiatives in environmental governance, water conservation, energy utilization, and land use can enhance its reputation in ecological protection, gain widespread social recognition, and strengthen its reputation and brand image in sustainable development.</li> </ul>	Possible	<ul style="list-style-type: none"> <li>Long-term</li> </ul>	Medium	<ul style="list-style-type: none"> <li>Own production and operations</li> </ul>	<ul style="list-style-type: none"> <li>Increased revenue</li> </ul>

# Resilience Transformation Initiatives

## Risk Management Mechanism

Nature-related risk and impact management is an integral part of comprehensive corporate risk management framework. Jinko Solar has obtained the ISO 37301:2021 compliance management system certification. The Company conducts nature-related risk assessments and management based on its “Three Lines of Defense” for risk management, following the logic of “Identification, Analysis, Assessment, and Response”. The Risk Compliance and ESG Management Committee leads annual nature-related risk assessments and analyses. It works closely with leaders of other functional departments and manufacturing bases to identify and assess potential nature-related risks and develop response strategies. The Risk Compliance and ESG Management Working Group implements risk control measures, tracks progress, and regularly reports to the management and governance layer.

### Jinko Solar's Nature-related Risk and Opportunity Management Process

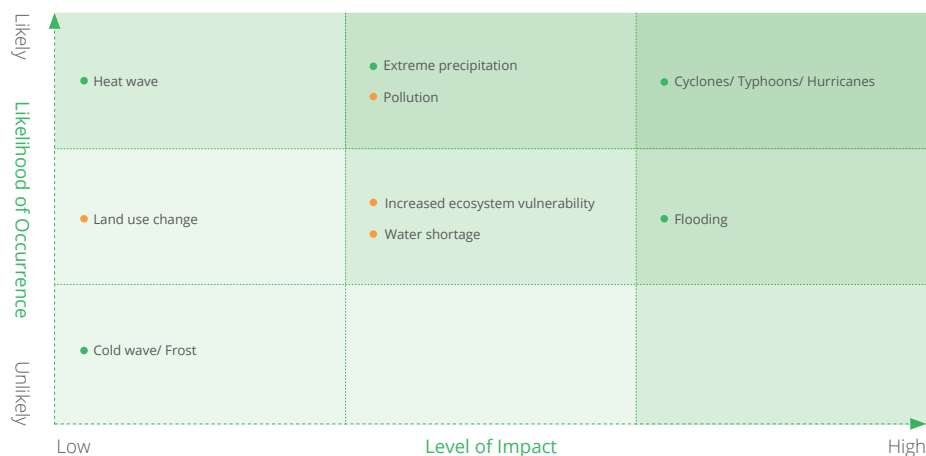




Our materiality assessment of climate risks and opportunities reveals that 1 physical risk, 1 transition risk, and 2 transition opportunities demonstrate high probability of occurrence and material impact levels, with their influence intensifying over time. Physical risks primarily manifest the short, medium, and long term, while transition risks and opportunities are anticipated to have a greater impact over the medium to long term. Given that the overall impacts of climate opportunities exceed those of climate risks, we will continue monitoring these risks and opportunities, enhance our response mechanisms, and establish a resilience management benchmark for the PV sector.

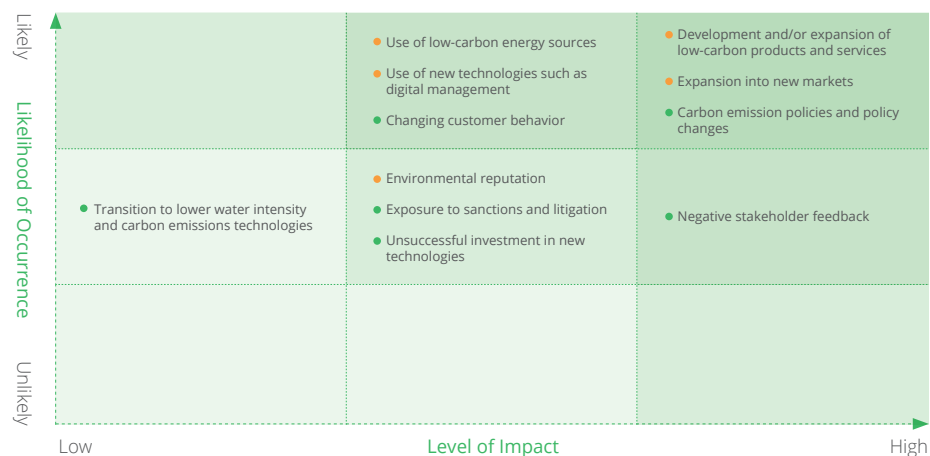
## Physical Risk Matrix

- Acute risks
- Chronic risks



### Transition Risk and Opportunity Matrix

- Transition Risks
- Transition Opportunities



## Assessment of Climate Risks and Opportunities at Different Time Horizons






Physical Risks	Transition Risks	Transition Opportunities
<ol style="list-style-type: none"> <li>Heat wave</li> <li>Extreme precipitation</li> <li>Cyclones/ Typhoons/ Hurricanes</li> <li>Flooding</li> <li>Cold wave/ Frost</li> <li>Water shortage</li> <li>Increased ecosystem vulnerability</li> <li>Land use change</li> <li>Pollution</li> </ol>	<ol style="list-style-type: none"> <li>Carbon emission policies and policy changes</li> <li>Exposure to sanctions and litigation</li> <li>Unsuccessful investment in new technologies</li> <li>Transition to lower water intensity and carbon emissions technologies</li> <li>Changing customer behavior</li> <li>Negative stakeholder feedback</li> </ol>	<ol style="list-style-type: none"> <li>Use of low-carbon energy sources</li> <li>Use of new technologies such as digital management</li> <li>Development and/or expansion of low-carbon products and services</li> <li>Expansion into new markets</li> <li>Environmental reputation</li> </ol>

# Risk Response Measures

For the assessed significant material risks and opportunities, we have formulated response strategies aligned with our 5-year business and operational plans. These strategies are implemented across 100% of our operational bases and business scope to address challenges including extreme weather, pollutant emissions, carbon regulations, changing market demands. We are committed to ensuring the effective allocation of resources through well-planned investments to support our sustainable development.

## Physical risks response

 <div> <p><b>Extreme precipitation, cyclones, etc.</b></p> <p>01</p> </div>	 <div> <p><b>Pollutant emissions</b></p> <p>02</p> </div>	 <div> <p><b>Other physical risks</b></p> <p>03</p> </div>
<p><b>Drainage system construction:</b> Upgrade drainage channels and replace with larger-diameter pipes. Install automatic drainage pumps in flood-prone areas.</p> <p><b>Disaster-resistant equipment procurement and renewal:</b> Gradually replace old equipment with components that have higher wind and waterproof performance. Increase R&amp;D investment in humidity and heat-resistant PV modules to enhance product performance in adverse climates.</p> <p><b>Material stockpiling and emergency plans:</b> Establish dedicated emergency material storage facilities equipped with necessary supplies such as flood sandbags, water pumps, and backup power sources. Develop emergency response plans and conduct regular drills.</p> <p><b>Insurance claims and risk sharing:</b> Purchase specialized insurance covering natural disasters to share potential economic losses. Promptly initiate claims procedures in the event of a disaster.</p>	<p><b>Emission control:</b> Implement emission and waste management with an internal control requirement of being 20% stricter than the legal emission standards in each operating location. Widely carry out measures to improve construction techniques, optimize work processes, and reduce pollutant emissions.</p> <p><b>High-efficiency equipment replacement plan:</b> Develop plans to phase out fuel-consuming equipment and update low-efficiency devices.</p> <p><b>Clean energy power supply upgrades:</b> Continuously promote the installation of rooftop PV modules, build energy storage systems, and purchase clean power to increase the proportion of clean energy usage.</p> <p><b>Circular technology investment:</b> Introduce advanced treatment processes and equipment to pretreat solid waste, exhaust gas, waste gases, and wastewater generated during production operations, enabling the recovery and reuse of solid waste, waste heat recovery from thermal exhaust gases, and the reuse or cascading utilization of reclaimed water.</p> <p><b>Green empowerment of supply chains:</b> Assist suppliers in planning ESG action pathways and schemes and encourage upstream value chain partners to reduce negative environmental impacts in production activities.</p>	<p><b>Biodiversity conservation policy:</b> Develop the <i>Jinko Solar Biodiversity Conservation and Zero Deforestation Policies</i> and actively implement natural risk assessments.</p> <p><b>Eco-friendly siting:</b> Integrate ecological protection concepts into the full lifecycle of engineering construction. During factory development and planning stages, optimize siting to avoid disturbing important ecosystems and species habitats.</p> <p><b>Ecological conservation and restoration:</b> After project completion, promptly restore the surface, soil, and vegetation, and preserve the original species present before construction to minimize impacts on the surrounding environment, natural resources, and biodiversity.</p> <p><b>Ecological impact monitoring:</b> Review the value chain footprint and continuously track relevant indicator progress to reduce impacts on ecosystems and biodiversity within controllable limits.</p>



## Transition risks/opportunities response



### Carbon emission policies and policy changes

**Team deployment:** Equip professional legal teams in all operational regions globally to continuously monitor the latest developments in laws and regulations related to carbon trading, carbon fees, and carbon border taxes, avoiding financial losses due to non-compliance.

**Capability enhancement:** Regularly organize specialized training sessions for relevant internal personnel to continuously improve their understanding of relevant information.

**Introduction of carbon pricing mechanisms:** Explore the use of shadow carbon pricing to incorporate considerations for climate change response into decisions on equipment and energy procurement.



### Development and/or expansion of low-carbon products and services

**Full lifecycle low-carbon management of products/services:** Actively implement a low-carbon product lifecycle management system. Optimize product design, enhance material recyclability, strictly control carbon emissions throughout the product lifecycle, and fulfill the Extended Producer Responsibility (EPR) obligation. Establish a comprehensive waste disposal, recycling and reuse mechanism. Conduct carbon footprint assessments for key products to ensure a low-carbon advantage.

**Building a recycling ecosystem:** Actively participate in the development of product recycling standards and promote the building of industry recycling standards and policy systems. Collaborate with logistics partners, dealers, and customers to guide value chain partners in implementing classified recycling.

**Cross-industry PV solutions:** Based on the renewable energy industry in which the Company operates, continuously expand the application fields of “PV+” solutions and explore the integration of efficient PV solutions with modern agriculture and desert ecosystem restoration.



### Other transition risks/opportunities

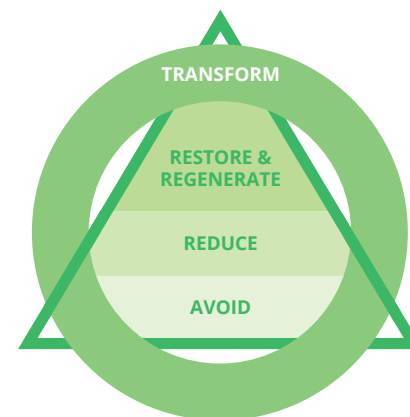
**Market insights:** Timely collect and analyze requirements from regulators, investors, customers, and consumers in all operational regions to ensure that the Company's climate management and disclosures bring positive benefits to financing and market capitalization management.

**In-depth global green energy cooperation:** Deepen exchanges with global industry partners to promote green energy cooperation and support the application of PV projects in developing regions and areas with extreme conditions. Share the achievements of innovative technologies and continuously explore new pathways for sustainable energy development.



## Strengthening climate resilience and emergency management capacities for extreme climate conditions

Jinko Solar Haining Base in Zhejiang Province are frequently exposed to floods, typhoons, and hurricanes in summer. In response, the Company has formulated the *Emergency Response Plan for Floods and Typhoons*, which is tailored to the natural environment and geographical characteristics of the Haining Base to clarify procedures and implement accountability systems. On the one hand, we have defined standardized management processes before, during, and after the flood season. On the other hand, we have added drainage pumps, upgraded rainwater treatment and recycling facilities, and installed dedicated rainwater pipelines based on the actual situations of the flood season, thereby enhancing operational management resilience. Over the next three years, the Company will further explore collaborative mechanisms with local governments and competent authorities to facilitate the evacuation and rescue of stranded personnel during extreme weather events by leveraging government resources. The Company will utilize both government and proprietary contingency funds, along with stockpiled emergency response and disaster relief supplies, to enhance its adaptive capacity for addressing physical climate risks.



AR3T Action Framework

We have integrated nature-related risk management into the Company's overall risk management strategy, following the AR3T action framework (Avoid, Reduce, Restore & Regenerate, Transform) proposed by the Science-based Targets Network (SBTN). We prioritize management measures that avoid or minimize negative impacts on nature at the source and take actions at all levels to contribute to achieving the global “nature-positive” goal.

# Preserving Lucid Waters and Lush Mountains

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04



# Diversified Green Products

## Efficient Modules Empowering Green Power Generation

Jinko Solar adheres to a technology-driven and innovation-led approach, actively implementing the technological innovation philosophy of “Exploring New Generation, Developing Next Generation, Mass-Producing Mature Generation”. Focusing on technological advancement and R&D achievement transformation, the Company continuously drives product upgrades and has earned numerous accolades, including “National Enterprise Technology Center”, “National Technology Innovation Demonstration Enterprise”, and “Manufacturing Single Champion Enterprise”. The exceptional product performance has also gained widespread recognition from rating agencies. We have achieved the highest PV ModuleTech Bankability Rating (AAA) and have been recognized as a Tier 1 photovoltaic provider by Bloomberg New Energy Finance (BNEF). Besides, we take the top spot on the list of Wood Mackenzie Global Solar Module Manufacturers.



Efficiency



Resilience



Green

### © Higher Conversion Efficiency

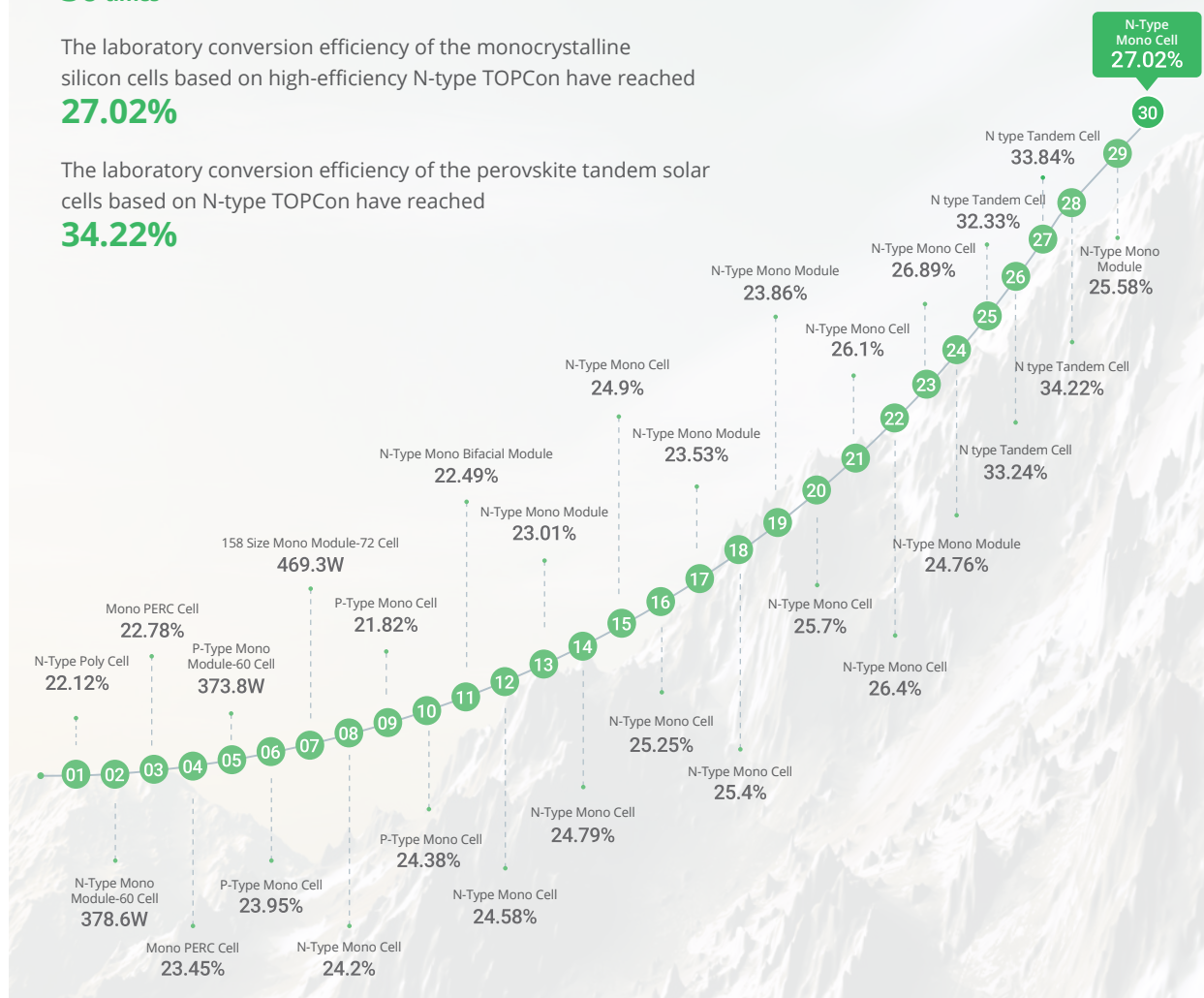
As a global leader in N-type TOPCon technology, Jinko Solar achieved dual breakthroughs in technology iteration and product upgrades. As of June 2025, the Company's average mass-production efficiency of cells in the golden zone exceeds 26.7%, the laboratory conversion efficiency of the monocrystalline silicon cells based on high-efficiency N-type TOPCon have reached 27.02%, and the laboratory conversion efficiency of the perovskite tandem solar cells based on N-type TOPCon have reached 34.22%, driving innovation in the PV industry. The third-generation Tiger Neo PV module, integrating multiple innovative technologies including 20BB, HCP, MAX, and FP, delivers a maximum power output of 670W and a module conversion efficiency of up to 24.8%, with a bifaciality rate of 85%.

Jinko Solar has broken world records

**30 times**

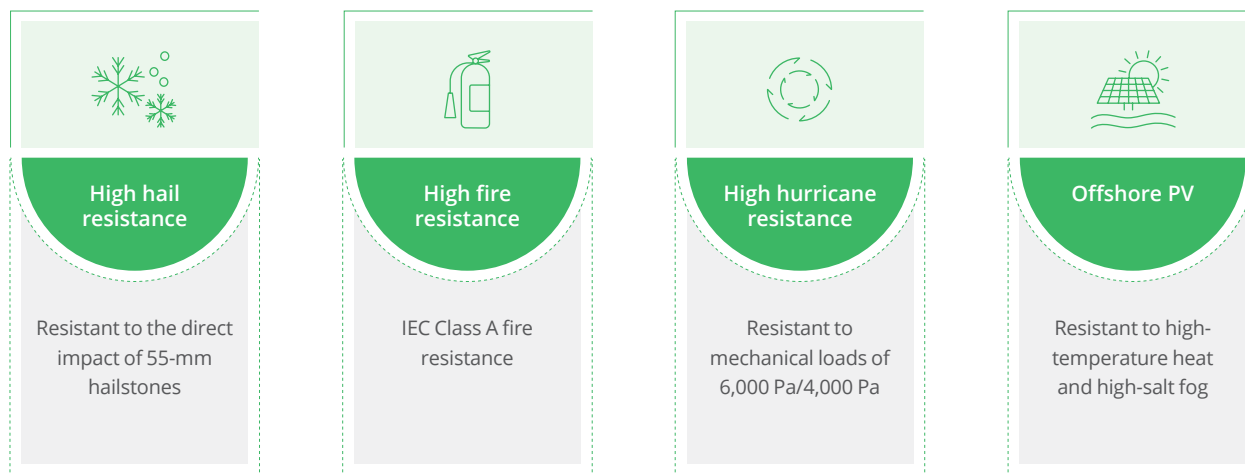
The laboratory conversion efficiency of the monocrystalline silicon cells based on high-efficiency N-type TOPCon have reached **27.02%**

The laboratory conversion efficiency of the perovskite tandem solar cells based on N-type TOPCon have reached **34.22%**

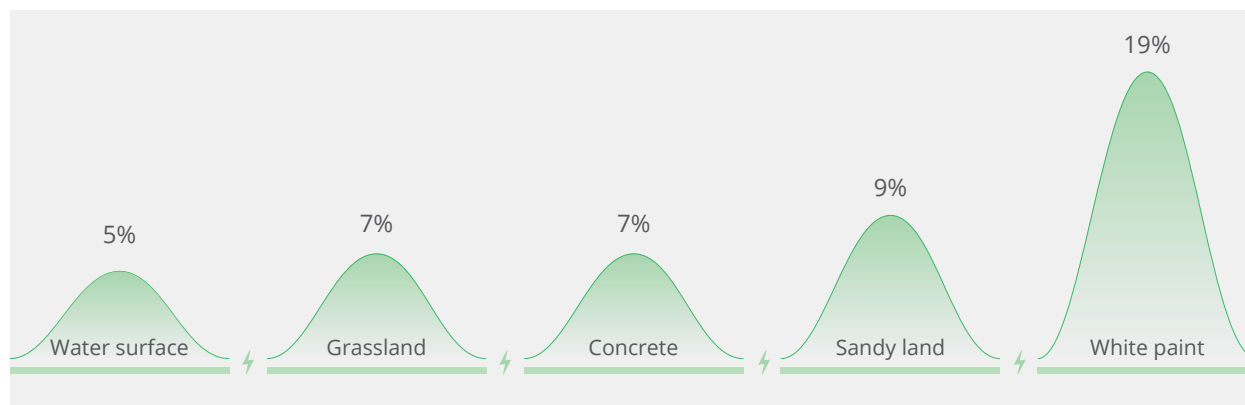


## © Broader Application Scenarios

The Company prioritizes the power generation stability and reliability of its products across diverse environments, developing and iterating differentiated product series. It offers high-performance modules tailored for specialized scenarios such as offshore and extreme cold climates, featuring outstanding resistance to hail, wind loads, and fire, while also excelling in anti-dust, anti-snow accumulation, high-efficiency power generation, and long-term reliability. To enhance power generation benefits across different scenarios, Jinko Solar has advanced bifacial technology, with the backside power generation gain reaching up to 25%.



## Actual Backside Power Generation Gain in Different Application Scenarios



## © Greener Eco-friendly Modules

The Company highly values the issues of biodiversity conservation at project sites and continuously explores innovative “PV+” ecological restoration solutions, achieving remarkable results. By the end of the reporting period, the Company had deployed over-gigawatt-scale PV desertification control projects in Gansu, Ningxia, Qinghai, Inner Mongolia (China), and overseas regions.



The Yellow River's “Ji”-Shaped Bay — Baofeng Power Station in Ningxia

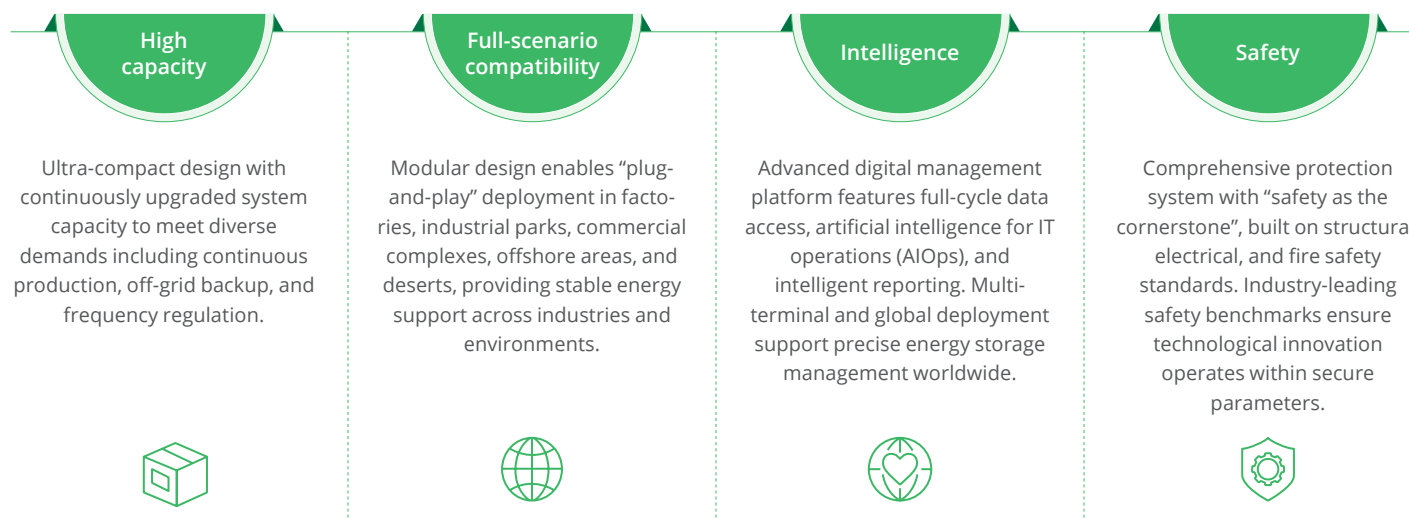


The 1,000-Megawatt PV Project in Hainan Base



## Energy Storage Products Facilitating Smart Energy Usage

The Company is committed to enhancing system integration efficiency through standardized design, reinforcing safety protection through intelligent management, and meeting long-term energy storage needs through flexible expansion capabilities. By doing so, we drive deep integration of energy storage technology with diverse industries and provide more efficient and reliable energy solutions for global customers. As of June 2025, Jinko Solar's Energy Storage R&D Center has applied for and obtained a total of 393 patents, including 96 overseas invention patents. It provides stable, reliable, and competitive products and solutions to customers worldwide. Having ranked as a Tier 1 Global Energy Storage Manufacturer by BNEF for several consecutive quarters, the Company earns widespread recognition from customers and the market.



### Featured projects

#### Tahiti PV+ESS Project, French Polynesia

#### PV Hybrid ESS Project, Zhejiang Jiande

### System capacity

**17.2<sub>MWh</sub>**

**55.04<sub>MWh</sub>**

### Project overviews

This is the first local large-scale photovoltaic and energy storage project that combines agriculture with renewable energy. It overcomes challenges such as high humidity and salinity in the coastal environments and continuously supplies power to photovoltaic greenhouses for “100% organic” production on a 10-hectare plot, achieving a green combination of agriculture and renewable energy.



Covering an area of over 3,000 square meters, the Jiande Photovoltaic and Energy Storage Project utilizes the SunTera liquid cooling system. Upon commissioning, it will emerge as the first independent energy storage power station in Jiande City to connect to the power grid. It enhances the grid's peak power supply capability and effectively optimizes the regional power grid structure to ensure regional power supply safety.



## Promoting Eco-friendly Product Philosophy

The Company adheres to the concept of sustainable development, conducts product life cycle assessments (LCA) in accordance with IEC TS 62994, ISO 14067 and other LCA related standards, and identifies external impacts from “cradle to grave”, including resource usage, ecological consequences, human health, etc. The LCA assessment report shows that the Company's most significant life cycle impacts are climate change, resource utilization, and water use. During the reporting period, the shipment volume of N-type products with simplified LCA certification and full LCA certification accounted for 99.7% and 95.1% of the Company's total shipments in 2024, respectively.

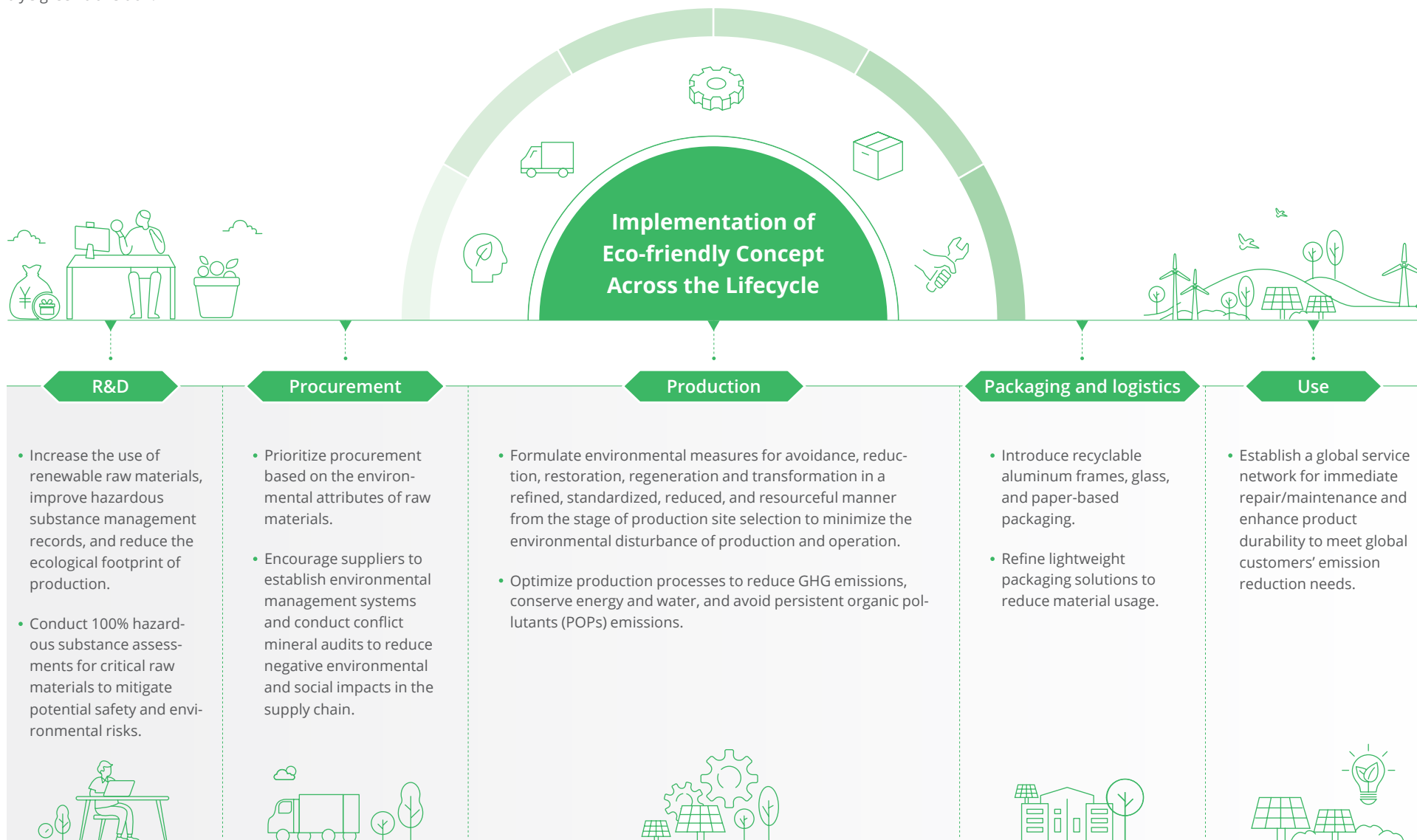
### Life Cycle Environmental Impact Factors Identification<sup>21</sup>

	Relevant factors	Impacts	Primary stage	Secondary stage	Note
Highly relevant indicators	Climate change	Global warming	Upstream raw material procurement	Distribution	Indirect GHG emissions associated with upstream production
	Resource utilization	Fossil fuel consumption	Upstream raw material procurement	Distribution	Indirect fossil fuel consumption associated with upstream production
	Water use	Water consumption	Upstream raw material procurement	Maintenance	Indirect water usage associated with upstream production
Low/Non-relevant indicators	Biomass impact, land use, particulate matter, eutrophication (marine and freshwater), human toxicity (hazardous substances), ionizing radiation, ozone depletion, photochemical ozone formation, etc.				

<sup>21</sup> The assessment results are derived from a full lifecycle impact evaluation per kWh of electricity generated, in compliance with IEC TS 62994.



We actively investigate whether product materials used harmful ingredients and explore the adoption of green materials, such as fluorine-free backsheets, lead-free ribbons, and water-based fluxes. In 2024, 6 RoHS certifications and 5 REACH certifications were obtained, with the shipment volume of products certified by REACH exceeding 90%. Additionally, the Company integrates green principles into the entire product lifecycle—design, raw material procurement, manufacturing, packaging, and transportation—to minimize environmental impact, enhance resource efficiency, and accelerate the industry's green transition.



# Synergistic Green Value Chain Development

## Responsible Supply Chain Building Enhancement

### © Supply Chain Management System

Jinko Solar is well aware that business partners are critical collaborative forces for corporate sustainable development. The Company focuses on nature-related risk management and sustainable management capability building across its value chain, to ensure compliance with low-carbon principles and environmental standards in raw material procurement, product transportation, and other processes. In 2024, Jinko Solar joined the A-list of CDP Supplier Engagement Assessment (SEA) as a result of three consecutive increases, and has been selected as a Supplier Engagement Leader.

#### Scientific Planning for Sustainable Supply Chain Strategy

##### Goal and strategy setting

Establish clear sustainable development goals, such as reducing GHG emissions across supply chain and achieving 100% supplier sign-off on *Jinko Solar Supply Chain Partner Code of Conduct*, along with corresponding implementation strategies.

##### Supplier assessment criteria

Develop a supplier assessment system incorporating environmental, social, and governance (ESG) indicators, including suppliers' GHG emissions, environmental management system certifications, and environmental protection practices.

##### Collaboration and communication mechanisms

Plan cooperation methods with suppliers, such as regular sustainable development surveys and visits, collaborative conduct of Scope 3 GHG inventories, to ensure effective communication and joint implementation of goals and strategies.

#### Comprehensive Implementation of Sustainable Development Initiatives

##### Implement sustainable procurement

Screen and select suppliers based on assessment criteria and prioritize partnerships with companies demonstrating strong ESG performance to drive sustainable raw material sourcing.

##### Supply chain collaboration

Share energy-saving and emission-reduction technologies and best practices with suppliers to enhance their environmental management, such as providing guidance and cooperation on rooftop PV solutions.

##### Capacity building and support

Conduct ESG and GHG management training for suppliers and internal purchasing staff. Strengthen suppliers' sustainable development awareness and capabilities through internal purchasing staff as intermediaries.

#### Establishment of Comprehensive Supervision and Evaluation System

##### Performance monitoring

Regularly collect and review supplier environmental indicators and information. Track key indicators such as environmental compliance, GHG emissions, product footprint certifications, and resource usage to horizontally assess their environmental impacts.

##### Evaluation and feedback

Provide suppliers with assessment results, track improvements for non-compliant items, and urge corrective actions.

##### Internal audits and reviews

Conduct internal audits to ensure procurement processes adhere to sustainable principles, review the effectiveness of supply chain management, and identify potential areas for improvement.

#### Continuous Improvement and Supply Chain Management Optimization

##### Continuous improvement

Monitor and support suppliers in developing and implementing corrective actions for non-compliant items identified in performance monitoring and internal reviews.

##### Innovation and optimization

Explore new technologies and business models, such as collaborating with suppliers on PV recycling innovations, to drive green transformation in the supply chain.

##### Recognition of outstanding suppliers

Set up incentive mechanisms for suppliers with excellent ESG performance, including deeper business collaboration, increased procurement volumes, and awards.



## © Supplier Capability Enhancement

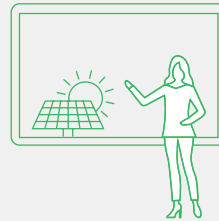
As a leader and pioneer in low-carbon management, the Company continuously empowers supplier partners in sustainable capability building through regular online ESG training sessions and briefings. Training content encompasses audit standard interpretation, case studies, common issues, and best practice sharing. Additionally, for suppliers with sustainability intentions or those in early-stage ESG development, we provide on-site guidance, including general training, non-compliant item interpretation, and system establishment. For suppliers with weak ESG awareness and low cooperation levels, we implement procurement reduction or elimination procedures.

In 2024, the Company conducted on-site due diligence for 44 high-risk suppliers representing 50% of procurement value, and performed online audits for 69 medium-risk suppliers. Meanwhile, we tracked core data such as corporate governance and climate change of low-risk suppliers through sustainability supplementary assessment questionnaires to understand their ESG core performance and drive ongoing system improvement.

## Building a Sustainable Value Chain Ecosystem

Jinko Solar remains committed to combining technological innovation with green development to build a resilient and sustainable industrial ecosystem.

In May 2025, the Inaugural Global Business Summit on Belt and Road Infrastructure Investment for Better Business Better World and Sustainable Development Goals was officially held in Jakarta, Indonesia, co-hosted by the United Nations Global Compact (UNGC) in partnership with the Government of Indonesia and collaborating parties. Jinko Solar collaborated with ecosystem partners distributed across the “Belt and Road Initiative” countries’ industrial chains to jointly release the Initiative for Global Solar Sustainable Alliance (GSSA). Guided by the UN Global Compact’s Ten Principles and the UN Sustainable Development Goals (SDGs), the initiative encompasses three core areas: “Just Transition”, “People-Centered Development”, and “Improved Governance”, aimed at driving comprehensive progress in the PV sector’s environmental, social, and governance (ESG) domains and positive impacts on international markets.



**“We appreciate the contributions of the global solar sector - particularly Chinese photovoltaic enterprises - in advancing the global energy transition. We look forward to collective actions from the solar industry that can set a global benchmark for sustainable development.”**

—Ms. Meng Liu, UNGC China Representative



Jinko Solar's GHG Management Training for Key Suppliers



Sustainable Development Training for Purchasing Staff



The Initiative for Global Solar Sustainable Alliance (GSSA)

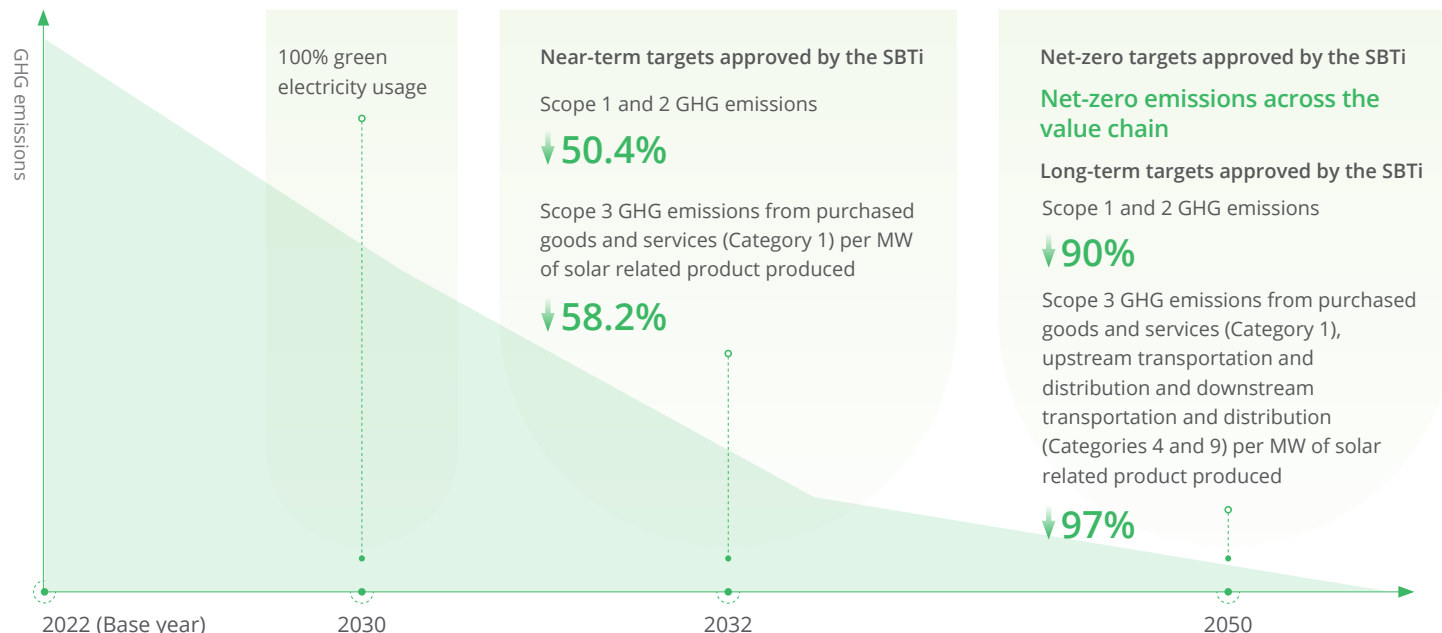
# Environment-friendly Operations

Jinko Solar consistently strengthens its environmental management systems and measures within production and operations to minimize negative impacts and associated risks on the natural environment. This strategy involves a two-pronged approach: First, conducting third-party and internal audits of production bases under the *Jinko Solar ESG Audit Standard*. Second, benchmarking and enhancing practices against leading international ESG audit standards. As of June 2025, 5 of our bases have completed Sedex SMETA audits, and 2 bases have completed Solar Stewardship Initiative (SSI) ESG audits. Furthermore, we are pursuing Social Accountability International SA8000 and Responsible Business Alliance (RBA) Standard audit certificates across our production bases.

## Low Carbon Management

### © Carbon Reduction Target Pathway

With a firm commitment to be a global leader in the energy transition, Jinko Solar continuously supports the 1.5°C temperature control pathway of the *Paris Agreement*. At the end of 2021, we joined the Science Based Targets initiative (SBTi) and established science-based, rational, comprehensive carbon reduction targets. After systematic inventory and analysis, the Company formally submitted its target-setting application in May 2023 and received official validation in December 2023. We have become the first Chinese photovoltaic enterprise to have all three major emission reduction targets approved by SBTi.



#### Near-term Targets

Commit to reducing absolute Scope 1 and 2 GHG emissions 50.4% by 2032 from a 2022 base year

**50.4%**

to reducing Scope 3 GHG emissions from purchased goods and services 58.2% per MW of solar related product<sup>16</sup> produced by 2032 from a 2022 base year

**58.2%**

to increasing annual source of renewable electricity to 100% by 2030

**100%**

#### Long-term Targets

Commit to reducing absolute Scope 1 and 2 emissions 90% by 2050 from a 2022 base year

**90%**

to reducing Scope 3 GHG emissions from purchased goods and services (Category 1), upstream transportation and distribution and downstream transportation and distribution (Categories 4 and 9) 97% per MW of solar related product produced within the same timeframe

**97%**

#### Net-Zero Target

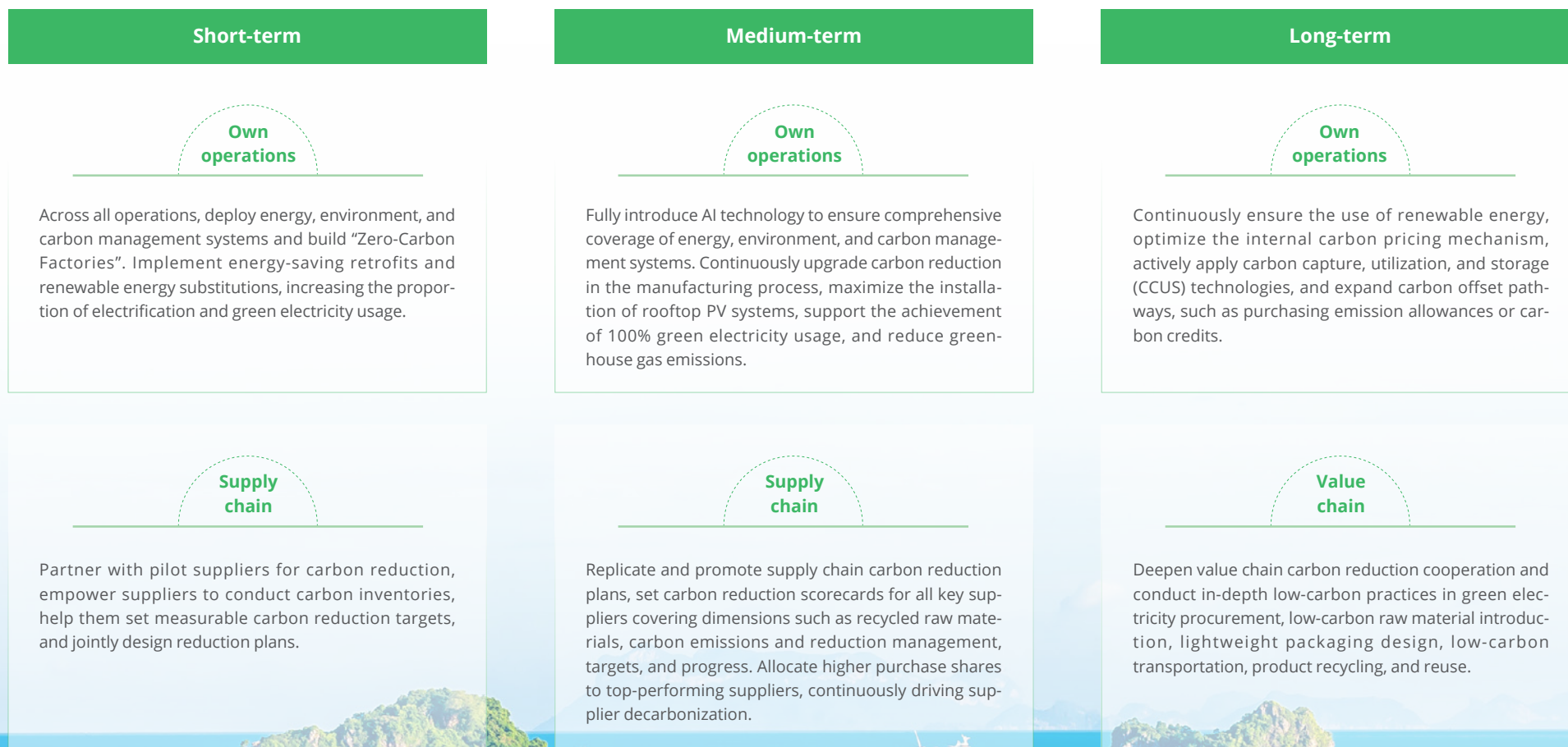
Commit to reaching **net-zero GHG emissions across the value chain by 2050**

<sup>16</sup>Each unit of photovoltaic-related products is measured by production volume in MW.



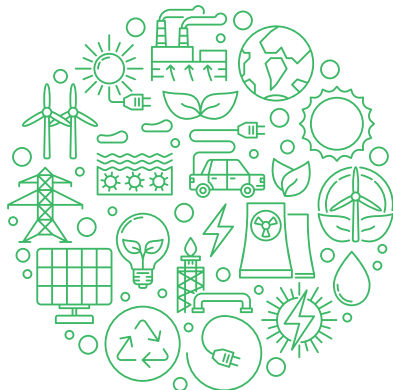
To gradually achieve net-zero emissions by 2050, Jinko Solar has developed short-, medium-, and long-term carbon reduction strategies from the perspectives of its own operations and the value chain, steadily advancing greenhouse gas and energy management and ensuring an increase in the proportion of renewable energy usage. Relying on LCA analysis tools, the Company identifies and analyzes the life cycle energy consumption of core product categories, enhancing the LCA product certification rate. We collaborate with upstream suppliers to implement emission reduction initiatives while proactively fulfilling extended producer responsibility (EPR) obligations downstream. This includes managing end-of-life PV module recycling, reuse, and waste disposal to comprehensively reduce GHG emissions across the value chain and facilitate the transition to low-carbon business models.

### Jinko Solar's Short-, Medium-, and Long-term Carbon Reduction Strategies

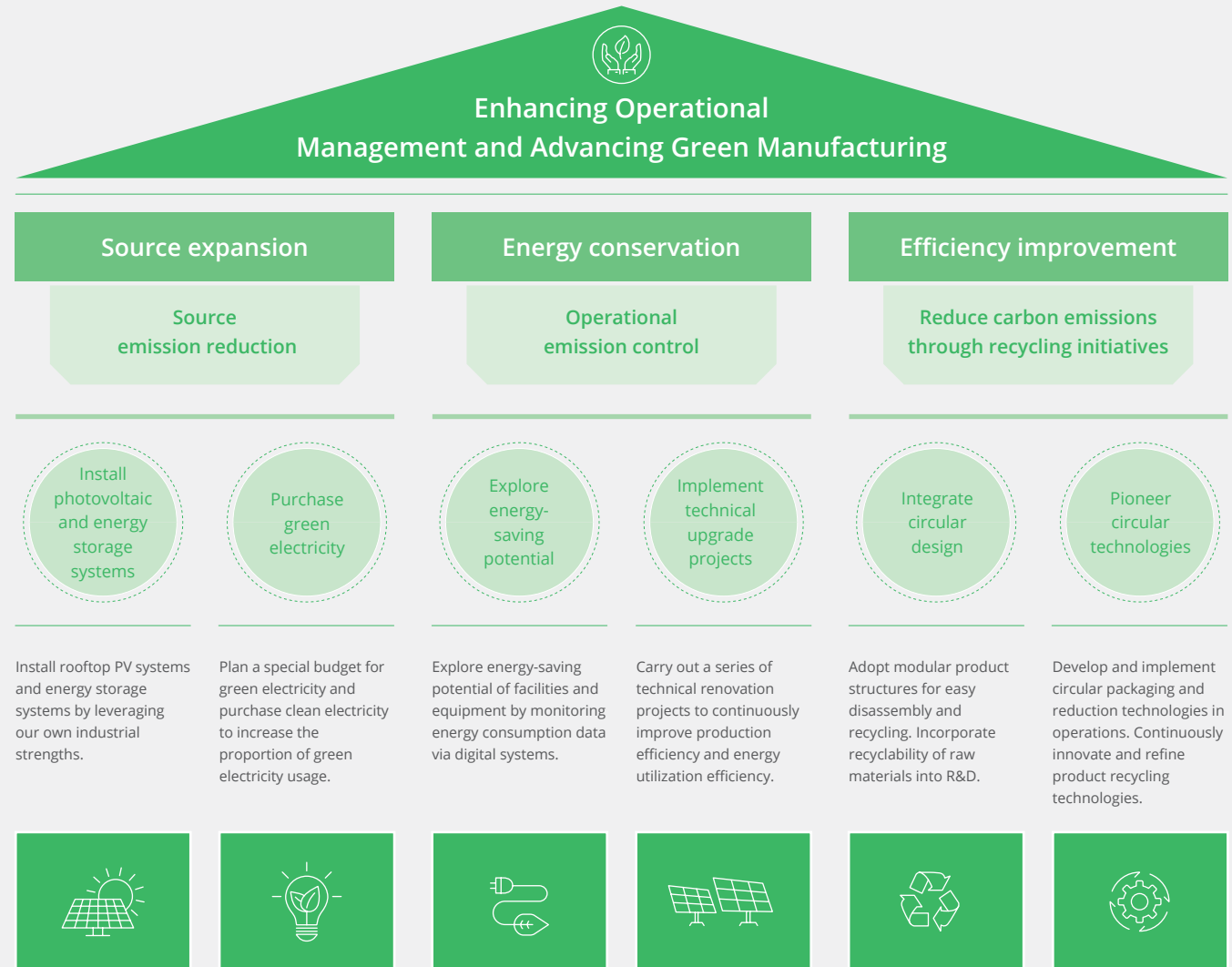


## © Carbon Reduction Practices

Under the global consensus on addressing climate change, Jinko Solar has introduced an innovative “Four-dimensional Three-green Low-carbon Quality Management Model”, redefining the connotation of “quality & low-carbon” management. Specifically, the “Four-dimensional” approach spans the entire life cycle of product design, manufacturing, operation and maintenance, and recycling. It integrates quality, energy efficiency, carbon footprint, and environmental standards to create a closed-loop management system with resource recycling at the core, achieving a green and low-carbon upgrade across the entire chain. The “Three-green” strategy focuses on lifecycle green management, green supply chain development, and expansion of green application scenarios, driving dual-track energy transition. This model blazes a new trail by incorporating “carbon” as a quality indicator. With the “Jinko Carbon Management System”, 9 factories have earned “Zero-Carbon Factory” certifications, setting industry benchmarks for low-carbon management.



### Jinko Solar's Operational Emission Reduction Roadmap





## Source Emission Reduction

“Source expansion” refers to advocate clean energy usage from the source. As a globally leading vertically integrated photovoltaic and energy storage enterprise, Jinko Solar fully assesses and explores the potential for building photovoltaic and energy storage systems at its operational sites. We strive to comprehensively construct PV and energy storage systems by leveraging our own industrial strengths.

### Install photovoltaic systems

We install photovoltaic power generation systems on the roofs of all viable base buildings, using a centralized intelligent operation and maintenance management cloud platform to carry out centralized and intelligent supervision, enhancing economic benefits while increasing system stability. By the end of 2024, the Company had installed a total of 243.7 MW of rooftop photovoltaic power generation systems at manufacturing bases in Shangrao (Jiangxi Province), Haining (Zhejiang Province), and Yuhuan (Zhejiang Province). In 2024, the rooftop photovoltaic systems at all manufacturing bases generated a total of 213,310 MWh of electricity.



Rooftop Photovoltaic System at Chuxiong Base in Yunnan Province



Rooftop Photovoltaic System at Yuhuan Base in Zhejiang Province

### Deploy energy storage systems

Selected production bases are equipped with energy storage systems that charge during off-peak hours and discharge during peak periods, thereby improving energy efficiency and reducing grid dependency during peak periods.



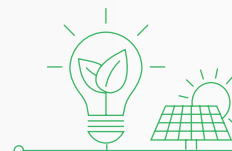
Energy Storage System in the Plant

### Purchase green electricity

Purchased electricity accounts for more than 98% of Jinko Solar's total electricity consumption. From the early stage of site selection for construction, the Company has taken into account the power structure of the local power grid. For instance, our Chuxiong Base in Yunnan Province is located in hydropower-rich area while Xining Base in Qinghai Province is in solar/wind-abundant zone. In 2024, the Company used a total of 4,456,287.95 MWh of renewable electricity, accounting for 48.19% of the total electricity consumption.



Aerial View of Yunnan Chuxiong Base



## Operational Emission Control

To promote energy-saving, emission-reducing, and cost-reducing work in the production and operation processes, the Company has comprehensively sorted out the process flows of products such as silicon wafers, cells, and modules. Targeting different process characteristics, we have identified high-potential energy-saving processes and planned personalized technical upgrade plans. In addition, the Company carries out carbon emission and energy management training for relevant employees at all levels, which cover carbon accounting and management, carbon disclosure and climate rating, green supply chain, etc. We encourage employees in relevant positions to actively identify energy-saving technical renovation scenarios and contribute energy-saving upgrade solutions to help reduce operating costs and achieve carbon reduction targets.



### Implementing staged technical upgrade plans to build an end-to-end energy-saving system

Based on the energy consumption characteristics of different production stages (including silicon wafer, cell, and module processes), the Company has implemented a "one process, one solution, same nature, same approach" technological upgrade strategy. On the one hand, we vertically identify high-energy-consuming process flows for the production of crystal pulling, wafers, cells, as well as modules, and customize upgrade plans. On the other hand, we formulate general high-quality technological upgrade plans for similar high-energy-consuming equipment and popularize them horizontally across all bases. Combining horizontal and vertical strategies, the Company keeps introducing new technologies, processes, and equipment, upgrades existing production equipment, process flows, and products, and continuously improves production efficiency while reducing emission intensity. In 2024, the Company carried out 109 technical upgrade projects for key production process, including waste heat recovery and chiller frequency conversion, saving a total of 112,782.37 MWh of electricity.



### Building a digital intelligent control platform to accurately pinpoint energy waste

The Company has introduced integrated energy management systems (EMS) and leveraged Industrial Internet and big data technology to establish a digital end-to-end energy management system. This system uses smart sensors to monitor and analyze energy consumption across production processes in real time. It identifies abnormal fluctuations in energy consumption and inefficient operating processes, accurately locates the "hot spots" of energy waste and provides data support for energy-saving technical upgrades. Taking the Wafer Business Unit as an example, combined with production plans and process parameters, the energy management system can monitor and analyze the energy flow and efficiency in the wafer plants in real time and predict energy consumption. It enables accurate record and analysis for high-energy-consuming wafer equipment, such as air compressors and chillers, and alerts for excessive energy consumption.



Integrated Energy Management System of Shangrao Base

109



Technical upgrade projects for key production process, including waste heat recovery and chiller frequency conversion

112,782.37 MWh

Electricity saved



Carbon Emission Management Training for Manufacturing Bases



## Reduce Carbon Emissions Through Recycling Initiatives

To achieve efficient recycling of resources and continuously strengthen its low-carbon management, Jinko Solar keeps exploring the integration of sustainable development and circular economy considerations into its operations and the entire production process. Starting from key stages such as product design and R&D, raw material procurement, production process, packaging and transportation, as well as product recycling, it builds a circular operation and production system.



### Actively practicing producer responsibility

Jinko Solar strictly complies with the extended producer responsibility system and the EU's *Waste Electrical and Electronic Equipment Directive* (WEEE Directive). We track the use of WEEE products, formulate WEEE product takeback programs and annual targets<sup>18</sup>, clarify management methods and regulations, and provide WEEE takeback guidance to consumers. Currently, we maintain long-term cooperation with recycling organizations such as PV Cycle, Soren, ECOLEC, Stichting Open, and ERP. We have registered and declared WEEE in the United Kingdom, Germany, Portugal, France, Spain, the Netherlands, Ireland, Belgium, Poland, and Italy. We provide customers with full lifecycle support for the recycling of waste photovoltaic products, from collection, packaging, tracking, to disposal.



<sup>17</sup> According to internal survey, Jinko Solar's primary metal materials used are aluminum, copper, iron, and tin, and raw materials include aluminum rods, tinned solder strips, iron plates, and cables. In 2024, the Company consumed 180,173 tons of aluminum, 58,522 tons of copper, 684 tons of iron, and 11,150 tons of tin. Based on supplier surveys, approximately 20% of the aluminum used was recycled aluminum, and approximately 45% of the iron used was recycled iron. Due to statistical difficulties of recycled copper and tin materials in the industry, no data has been obtained for the reporting year.

<sup>18</sup> The annual recycling targets are set with reference to WEEE Directive's requirement that "85 % shall be recovered, and 80 % shall be prepared for re-use and recycled."

## © Practice Net-zero Commitment

### Scope 1 and 2 Emissions

Jinko Solar calculates the GHG emissions from its own operations (Scope 1 and Scope 2<sup>19</sup>) based on the *Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*.

In 2024,  
the total GHG emissions<sup>20</sup> from the Company's operations were

**4,998.4** thousand tCO<sub>2</sub>e

down  
**3.48%** ↓  
compared to those in 2023

The operational GHG emission intensity  
per MW of production was

**19.93** tCO<sub>2</sub>e

down  
**13.88%** ↓  
compared to that in 2023

In 2024, the direct (Scope 1)  
GHG emissions were

**138.4** thousand tCO<sub>2</sub>e

up  
**33.04%**  
compared to those in 2023

accounting for  
**2.77%**  
of the total operational emissions

In 2024, the energy indirect (Scope 2)  
GHG emissions were

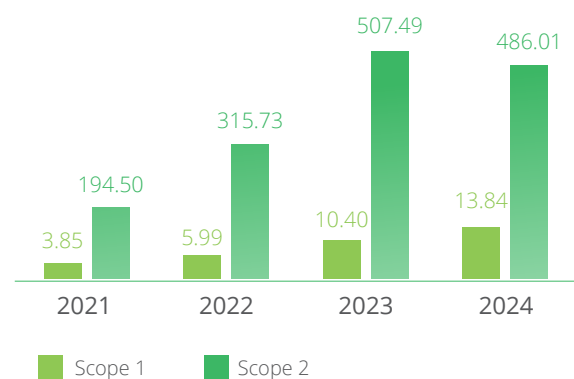
**4,860.1** thousand tCO<sub>2</sub>e

down  
**4.23%** ↓  
compared to those in 2023

accounting for  
**97.23%**  
of the total operational emissions

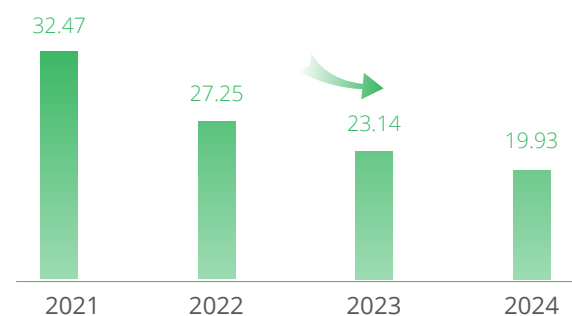
### Scope 1 & 2 GHG Emissions

Unit: 10,000 tCO<sub>2</sub>e



### Scope 1 & 2 GHG Emission Intensity

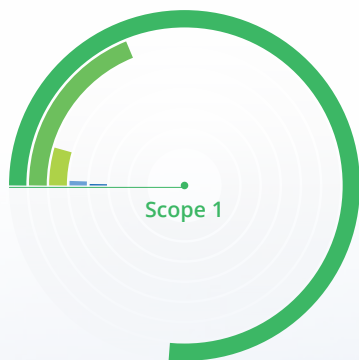
Unit: tCO<sub>2</sub>e/MW



<sup>19</sup>In accordance with standard practice, all "Scope 2" data cited in this section's analysis adopts the Scope 2 (location-based) accounting method.

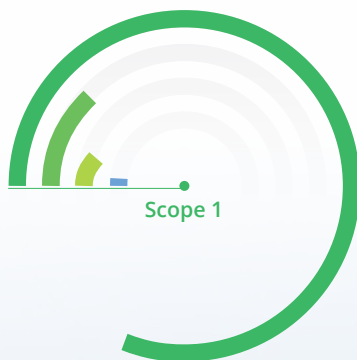
<sup>20</sup>Discrepancies in decimal places between sub-item sums and total greenhouse gas emissions data are normal statistical outcomes due to rounding to two decimal places. The same applies hereinafter.

In 2024, 81.45% of Scope 1 emissions originated from fugitive emission sources, 11.67% from stationary combustion sources, 5.2% from industrial emissions, and 1.68% from mobile combustion sources, involving no perfluorocarbons (PFCs) emissions.



**Proportions of Scope 1 Greenhouse Gas Emissions by Type**

HFC <sub>5</sub>	76.71%	N <sub>2</sub> O	0.04%
CO <sub>2</sub>	18.50%	PFC <sub>5</sub>	0
CH <sub>4</sub>	4.51%	NF <sub>3</sub>	0
SF <sub>6</sub>	0.24%		



**Proportions of Scope 1 Emissions by Sources**

Fugitive emission sources	81.45%
Stationary combustion	11.67%
Industrial emissions	5.2%
Mobile combustion sources	1.68%

In 2024, approximately 90% of Scope 2 emissions were generated from the production and operations of crystal pulling, cells, and modules.



**Scope 2 Emissions and Proportions by Production and Operation Divisions**

Unit: 10,000 tCO<sub>2</sub>e

Cells	202.33	41.63%	PV materials	9.89	2.04%
Crystal pulling	127.32	26.20%	Energy storage	1.16	0.24%
Modules	102.84	21.16%	Group management	0.14	0.03%
Wafers	42.33	8.71%			



## Scope 3 Emissions

Jinko Solar calculates other indirect (Scope 3) GHG emissions based on the *Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Accounting and Reporting Standard* by collecting data from suppliers and internal stakeholders, as well as estimating with reference to industry data.

In 2024, the total Scope 3 GHG emissions from the Company were 28,311.3 thousand tCO<sub>2</sub>e, a decrease of 4% compared to those in 2023. The Scope 3 GHG emission intensity per MW of production was 112.89 tCO<sub>2</sub>e, down 14.24% compared to that in 2023.

In 2024, Category 1 - Purchased Goods and Services was the primary source of Scope 3 emissions, accounting for 90.54% of total Scope 3 emissions, followed by Category 4 - Upstream Transportation and Distribution and Category 9 - Downstream Transportation and Distribution.

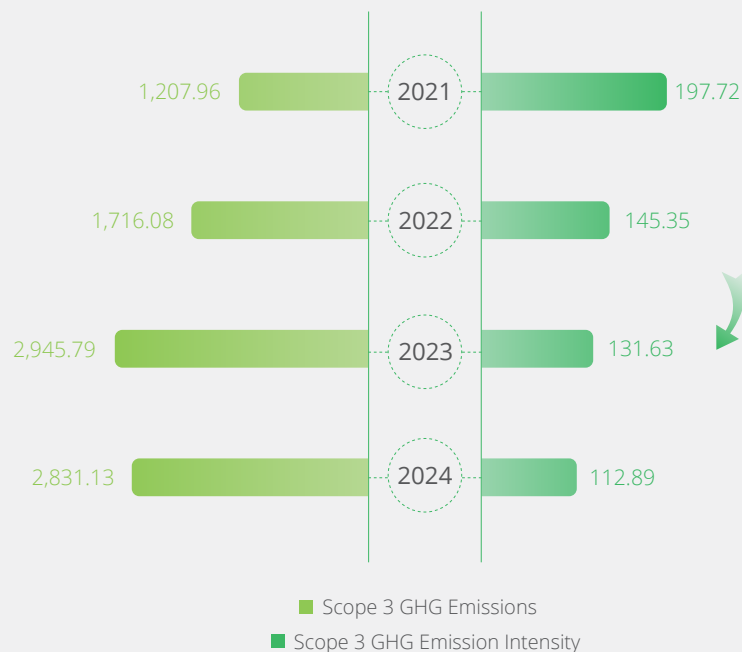
In 2024, silicon materials, glass, cells, and frames & aluminum rods were the main emission sources for Category 1 - Purchased Goods and Services, representing 86.93% of total emissions of Category 1.

### Scope 3 GHG Emissions

Unit: 10,000 tCO<sub>2</sub>e

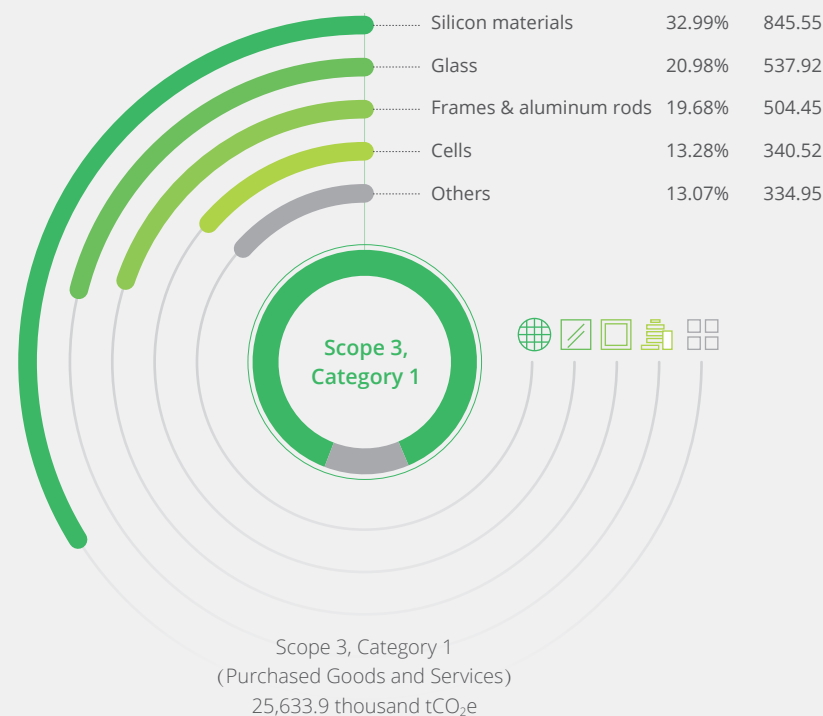
### Scope 3 GHG Emission Intensity

Unit: tCO<sub>2</sub>e/MW



### GHG Emissions from Category 1 Purchased Goods and Services by Category

Unit: 10,000 tCO<sub>2</sub>e



# Water Management

## ☉ Water Management System

Jinko Solar integrates water conservation considerations into high-level decision-making. The Strategy and Sustainable Development Committee, representing the Board of Directors, oversees the implementation of water strategies. The COO guides the direction for energy management strategy, while the Risk Compliance and ESG Management Committee drives the execution of water management strategies. The Operations and Management Center undertakes specific management goals, promotes water risk identification and analysis, implements specific water-saving projects at all production bases, and monitors the water consumption of all production bases. During the reporting period, the Company focused on medium- and long-term water management, conducted surveys on water consumption across all bases, and set medium- and long-term water management goals.

### Water Management Targets and Achievement in 2024

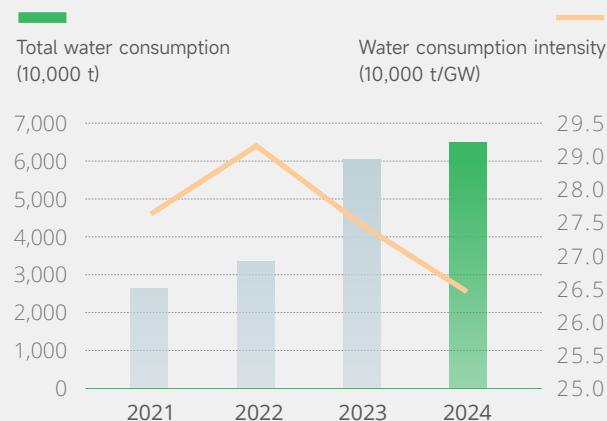
Short-term target	Commit to reducing water withdrawal volume 10% per MW of solar related product produced by 2025 from a 2022 base year.	10%↓
Medium-term target	Commit to reducing water withdrawal volume 15% per MW of solar related product produced by 2027 from a 2022 base year.	15%↓
Long-term target	Commit to reducing water withdrawal volume 20% per MW of solar related product produced by 2030 from a 2022 base year.	20%↓
Progress in 2024	Reduced water withdrawal volume 20% per MW of solar related product produced at the end of 2024 from a 2022 base year.	9%↓

## ☉ Water Withdrawal and Consumption Analysis

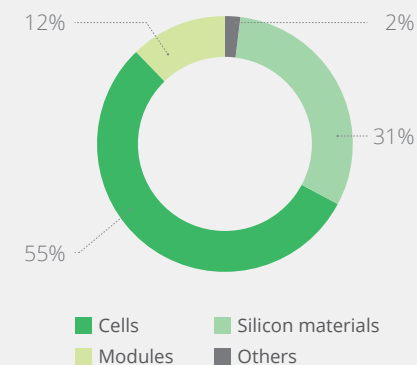
### Water withdrawal for each business unit (unit: 10,000 t)

Business Unit	unit	2021	2022	2023	2024
Crystalline silicon	10,000 t	791.64	1,408.95	1,807.47	2,098.64
Cells	10,000 t	705.35	1,753.92	3,763.88	3,693.93
Modules	10,000 t	216.33	245.67	573.64	768.12
Others	10,000 t	/	38.53	69.61	105.47
Total	10,000 t	1,713.32	3,447.07	6,214.60	6,666.17
Water intensity	10,000 t/GW	28.04	29.20	27.77	26.58

### Water Consumption and Water Intensity over the Past Four Years



### Water Consumption Proportion of Each Business Unit in 2024



## © Water-saving Technologies and Measures

The Company has conducted a comprehensive review and identification of its production and operation processes, continuously exploring water withdrawal and water consumption reduction measures. We comprehensively advance water lean management through process innovation, equipment upgrades, recycling system installation, management optimization, and reuse of rainwater and reclaimed water.

In the wafer cutting process, diamond wire cutting technology has replaced traditional slurry cutting. This initiative avoids a large amount of cutting fluid water usage and reduces cutting water consumption by more than 80%, not only improving cutting efficiency but also reducing silicon material loss. The production process has been re-planned to centralize water-consuming processes, including cleaning and testing for unified treatment and recycling of wastewater. Besides, the production process coordination has been optimized, and the water circulation mode is switched to low flow during equipment standby.



### Process innovation

The cooling system has been replaced with a closed-circuit cooling tower, reducing evaporative water loss by 90%. High-pressure spraying equipment is utilized for cell cleaning, consuming merely 40% of the water used by conventional immersion methods while achieving superior effectiveness. Additionally, flow sensors and intelligent controllers are installed on water-use equipment for real-time monitoring and automated pump/valve adjustments to precisely regulate flow rates, achieving 15-20% water savings.



### Equipment upgrades

We have established an internal water recycling network. Wastewater from silicon wafer cutting undergoes sedimentation and membrane treatment for reuse in processes with lower water quality requirements. Concentrated acid wastewater from cell production is recycled for graphite boat cleaning. Additionally, some concentrated water is reused in cooling towers and restrooms. We have implemented a cascaded water utilization system. For instance, wastewater from the overflow tanks in the Cells Business Unit's cleaning line is pre-treated for pH adjustment at the wastewater treatment plant and then used in exhaust gas and spray towers.



### Water recycling

During the reporting period, the Company carried out **95** special water-saving technological upgrade projects, achieving water savings of **7,987.8** thousand tons within the year.

### Management optimization



Monthly water efficiency benchmarking is implemented across production processes, with analysis and corrective actions for any anomalies. In addition, water-saving training has been conducted among employees, and slogans have been posted to foster a conservation culture. An incentive mechanism has been established to encourage employees to propose water-saving suggestions. Some bases also introduce urban reclaimed water as a supplementary source, reducing dependence on fresh water. Furthermore, to monitor the effectiveness of its water management and enhance supervision and communication with internal and external stakeholders concerning water-related issues, we actively respond to the 2024 CDP Water Security Questionnaire, which drives the continuous optimization and improvement of the Company's water management practices.

### Water resource recovery



Rainwater collection pipelines have been installed, and the collected water is pre-treated for landscaping irrigation and road cleaning. Cleaning wastewater from the Wafers Business Unit is treated through an environmental filter press and recycled for silicon wafer sorting and cleaning, achieving approximately a 20% reuse rate. Furthermore, some dilute acid water, dilute alkaline water, and rainwater are directed to our reclaimed water system, employing a "desilicization pre-treatment + multi-media filtration + ultrafiltration + primary reverse osmosis combination" process. The treated wastewater is then reused for purified water production. Concentrated water generated from the purified water station is effectively recycled through several avenues: it is reintroduced into the purified water system's filtered water tank for reuse, supplied to HVAC cooling towers as a cooling medium, and utilized in the treatment process of exhaust gas acid mist towers.



## Emissions and Waste Management

Jinko Solar rigorously complies with laws and regulations, regularly identifies and updates the dynamics of compliance management regarding emissions and waste, and conducts compliance evaluations at least once a year to ensure strict adherence to relevant provisions. In 2024, the Company has revised 11 environmental management systems, such as the *Wastewater, Exhaust Gas, and Noise Management System*, the *Environmental Protection Facility Management System*, the *Waste Environmental Protection Management System*, and the *Environmental Risk Management Guideline* in accordance with regulatory requirements.

We further improve the specific management requirements for “three wastes” (exhaust gas, wastewater, and solid wastes) and guide environmental management personnel at all levels of the Company to improve their environmental management capabilities and enhance execution efficiency. The Company takes an internal control requirement of being “20% stricter than the statutory emission standards of each operation location” in emissions and waste management, and incorporates these requirements into the annual performance evaluations of EHS personnel.

Jinko Solar focuses on the effective implementation of the “3R” (reduce, reuse, and recycle) principle throughout the waste treatment processes, building a comprehensive and efficient circular treatment mechanism. For various types of emissions and waste generated in each production and operation process, Jinko Solar prioritizes exploring the potential for reduction, reuse, and recycling. Taking into account the environmental and economic characteristics of different types of waste, we formulate customized circular treatment plans according to local conditions to achieve eco-friendly production in all aspects.



Exhaust Gas Treatment Facilities



Wastewater Treatment System



Solid Waste Treatment Training

In 2024, the exhaust emission decreased by **38.12%** year-on-year, with zero incidents of excessive pollutant emissions.

In 2024, the wastewater discharge volume was 43,714,615.36 cubic meters, representing a **10.76%** reduction year-on-year.

In 2024, the total recycled or reused general solid waste was 164,431.97 tons, with **100%** of disposal suppliers complied with the Company’s requirements.

## Noise Management

Jinko Solar places high priority on the prevention and control of noise pollution, strictly following the relevant laws and regulations in the places of operation to ensure that its noise management is scientific and legal. During the project construction preparation stage, the Company proactively conducts environmental impact assessments of noise in the areas, providing a reasonable basis for subsequent noise control measures.

To minimize the negative impact of noise on the external environment and employee health, the Company prioritizes low-noise equipment during equipment selection. We formulate a comprehensive equipment maintenance plan and carry out regular inspections and maintenance to ensure that the equipment

is always in good shape, reducing noise generation at the source. Additionally, the Company identifies hazardous factors based on occupational hazard control effectiveness evaluations, establishes a list of occupational hazard risk positions, and entrusts qualified third-party professionals to conduct annual occupational hazard factor assessments. For positions prone to noise hazards, the Company eliminates noise hazard factors or reduces decibel levels through engineering measures. Jinko Solar takes comprehensive occupational health protective measures to effectively prevent and control occupational hazard factors in the workplace and occupational diseases among production line employees.



### Core Measures for Noise Hazard Prevention and Control

#### Noise hazard warning

We truthfully inform employees of occupational hazards (including noise), protective measures, and emergency response procedures by signing occupational hazard notification letters, posting warning cards, and setting up notifications, signs, and labels.



#### Workshop engineering retrofit

We have introduced advanced eco-friendly low-noise equipment, optimized production processes, purchased sound-absorbing materials, and installed noise-proof enclosures to effectively weaken noise sources.



#### Provision of protective equipment

We distribute personal protective equipment (PPE) compliant with national occupational health and safety standards based on different job hazards, such as supplying noise-canceling earplugs to 100% of employees in noise-prone positions.



#### Employee occupational health examination

We offer pre-employment, on-the-job, and off-the-job physical examinations for all employees exposed to occupational hazards. We organize annual health examination for current employees and establish occupational health monitoring records. During the reporting period, we achieved 100% coverage of occupational health examination, 100% job transfer rate for employees with occupational contraindications, and zero occupational disease cases.



Employees in Noise-prone Positions Wearing Hearing Protection Devices

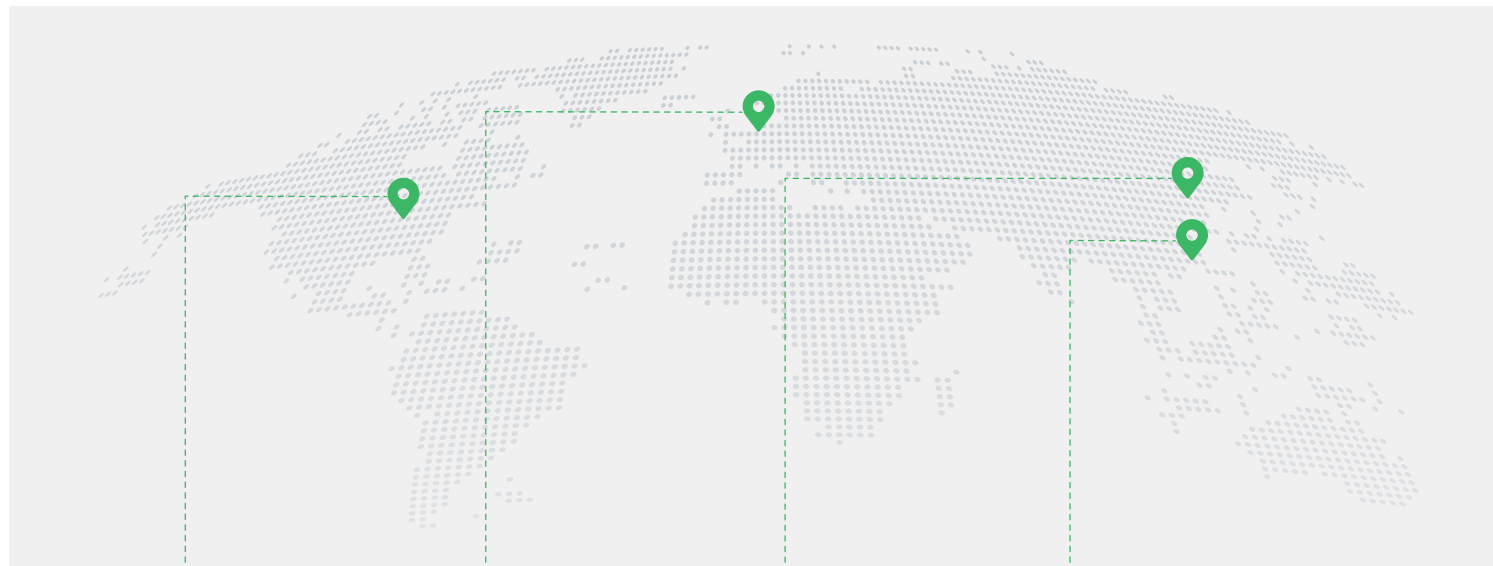
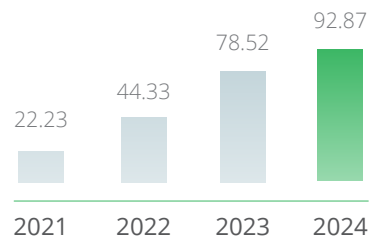
# Global Ecological Advancement

## Supporting Global Sustainability

Jinko Solar's global strategy has evolved from "global marketing" and "global manufacturing" to "global investment". The Company has established a vertically integrated production capacity covering the entire chain from silicon material processing, silicon wafers, cells to modules, serving approximately 4,000 customers across nearly 200 countries and regions. With over 120 global marketing branches and 35 service centers worldwide, we continuously enhance energy accessibility and service availability. **By the end of 2024, Jinko Solar had maintained its position as the global leader in photovoltaic module shipments, with cumulative shipments exceeding 300 GW.**

### Jinko Solar's Module Shipments

Unit: GW



#### In the Americas

The US Manufacturing Base has completed its upgrade and retrofit, with 2 GW full-capacity operation, enabling localized supply and continuous iteration of customized solutions.

#### In Europe

We launch customized, differentiated products and services. The third-generation Tiger Neo 3.0 modules are compatible with full-scene applications, including large-scale centralized power stations and distributed industrial and commercial rooftops. Its extreme-environment-resistant design ensures stable clean power for European customers.

#### In China

We build a vertically integrated industrial chain, enhance production efficiency through digital and intelligent projects, and lead the industry in N-type production capacity scale.

#### In Asia-Pacific

We adopt "local manufacturing + local service" for rapid market response. High-temperature and high-dust-resistant products ensure safe, efficient green energy supplies.

#### In other regions

In other regions such as Africa and Australia, we focus on distributed PV and PV-ESS integration. By optimizing PV-ESS service solutions, we enhance the added value of energy solutions, and have been the top shipper in Australia for four consecutive years.





### Supporting the “UAE Energy Strategy 2050” with superior products

The UAE Abu Dhabi Ajban PV3 photovoltaic project is one of the key projects for the UAE government to implement the “UAE Energy Strategy 2050”. However, the Ajban area faces harsh conditions such as high radiation, high temperatures, large diurnal temperature differences, and sandstorms, posing adaptability challenges for the power system in the energy transition. After rigorous research and selection, Jinko Solar became an important supplier for the Ajban PV3 photovoltaic project, supplying 1.8 GW of N-type TOPCon modules to the project. It continues to provide clean electricity to the UAE, providing a continuous source of green power for the UAE's energy transition.



UAE Abu Dhabi Ajban PV3 Photovoltaic Project



### Advancing win-win and shared development of China-Africa clean energy cooperation

In Garissa County, northeastern Kenya, tens of thousands of solar photovoltaic panels are neatly arranged, gleaming under the sun. This is the largest photovoltaic power station in East Africa - the Garissa Photovoltaic Power Station. The project was initiated by the Kenyan Ministry of Energy, with Jinko Solar providing products and technical solutions. Based on high conversion efficiency and low levelized cost of electricity (LCOE), the project's grid-connected electricity price is significantly lower than the local residential electricity price (about \$0.25 per kWh), at only \$0.0549 per kWh. This has greatly reduced the local clean energy prices, helping Africa to improve its power supply structure. It was praised by the President of Kenya for “bringing stable power supply to Garissa and contributing to the local economic development”, and was honored as International Energy Cooperation Best Practice of the “Belt and Road” Initiative by the National Energy Administration at the Third Belt and Road Energy Ministerial Conference.



Garissa Solar Power Plant, the Largest Grid-connected Solar Power Plant in East Africa

## Building a Zero-Carbon Ecosystem

Jinko Solar actively leverages its strengths by participating in international industry associations and major global exchange events, deepening dialogue and collaboration with ecosystem partners to jointly advance the widespread adoption of renewable energy worldwide.

Jinko Solar officially joined the Global Solar Council (GSC), collaborating with GSC and industry partners on policy development, technological innovation, and market expansion.

As the sole PV manufacturer invited, Jinko Solar spoke at the 14th Assembly of the International Renewable Energy Agency (IRENA), joining top global renewable energy developers to discuss high-efficiency energy storage solutions and technological advancements.

Nearly 100 UN Global Compact (UNGC) member companies visited Jinko Solar to explore its development path, corporate culture, and green practices.

Jinko was invited to participate in the 2024 World Energy Storage Conference.

As the only Chinese photovoltaic company, Jinko Solar participated in the 18th Global Roundtable held by the United Nations Environment Programme - Finance Initiative (UNEP FI) in Geneva, Switzerland, sharing insights on global sustainable finance progress with various groups.

April 2024

April 2024

April 2024

June 2024

July 2024

September 2024

November 2024

November 2024

December 2024

May 2025

As the only invited speaker from the PV and energy storage sector, Jinko Solar delivered a keynote speech at the 7th China-France Round Table Conference on Industrial Cooperation in Paris, sharing achievements in technological innovation, green manufacturing, and ESG.

Jinko Solar was invited to attend the World Economic Forum's 15th Annual Meeting of the New Champions Summer Davos forum, engaging in discussions on "Energy Transition Trends: China's Roadmap" and "Industrial Energy Transformation".

As a PV industry representative, Jinko Solar was invited to speak at the 2024 Summit of the Forum on China-Africa Cooperation (FOCAC) opening ceremony.

As a leading global photovoltaic and energy storage company, Jinko Solar was invited to attend the 29th meeting of the Conference of the Parties (COP29) to the *UN Framework Convention on Climate Change (UNFCCC)* and participated in several forum speeches.

As the first solar company to join the RE100 initiative globally, Jinko Solar was invited to attend the Climate Group Asia Action Summit, standing as the only Chinese corporate representative to speak at the event.





# Planning for the Pathway to Sustainability

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# 05



# Overall Goals and Progress

## Resilient Transformation, Marching Toward Sustainability

We recognize that coexisting harmoniously with nature begins with understanding the challenges our environment faces. In 2024, we adjusted the key material issues within our operational boundaries. Through a thorough assessment of the current landscape, we have defined key tasks and targets for future improvement and development.

### Material issues:

- Climate Action
- Energy Utilization
- Water Stewardship
- Emissions Control
- Waste Reduction
- Circular Economy

## Immediate Actions, Implementing Core Measures

We actively, proactively, and passionately engage in nature-positive initiatives, accelerating sustainability efforts across procurement, production, transportation, and service. In 2024, Jinko Solar invested approximately RMB260 million in energy conservation and environmental protection. However, this is neither our starting point nor our endpoint.

### Core measures:

- **Climate Action:** Strengthen climate resilience, provide low-carbon solutions globally, and build a low-carbon ecosystem from operations to the value chain.
- **Energy Utilization:** Strengthen energy planning, introduce high-efficiency equipment, accelerate the renewal of energy-saving technologies, implement energy audits and monitoring to fully explore energy-saving potential.
- **Water Stewardship:** Introduce water ecosystem risk assessments and improve water recycling systems to increase reuse rates for reclaimed water, rainwater, and wastewater. Implement water-saving management to improve utilization efficiency.
- **Emissions Control:** Establish a precise monitoring system to track air and wastewater emissions in real time. Optimize treatment processes to minimize environmental impacts.
- **Waste Reduction:** Optimize production processes to improve material efficiency, reduce waste generation, and enhance recycling through external partnerships.
- **Circular Economy:** Deepen product eco-design and refine closed-loop mechanisms across production, operation, and recycling. Strengthen upstream and downstream collaboration, and build a circular economy industry chain.

## Arduous Pathways, Forging Ahead Steadily

To achieve greater sustainability, we will continue innovating service models and exploring transformative pathways for sustainable development in the global photovoltaic industry.

### Innovation priorities:

- Further improve the conversion efficiency of products to enhance the development potential of the industry.
- Continuously explore the recycling and reuse pathways for photovoltaic and energy storage products throughout their entire life cycle.
- Lead the value chain in deepening green transformation initiatives.
- Explore service models that harmonize with the ecology in fragile ecosystems such as oceans, deserts, and gobi.

## Solemn Commitments, Embarking New Journey

Based on net-zero emissions in the value chain and eco-friendly operations, we will accelerate industry standardization and scalability through cutting-edge products and technologies. Together with stakeholders, we will turn visions of “Green-Powered Cities” and “Eco-Factories” into reality - embarking today for a brighter tomorrow.

By 2050,  
we will achieve  
**net-zero GHG emissions  
across the value chain**

2024

2030

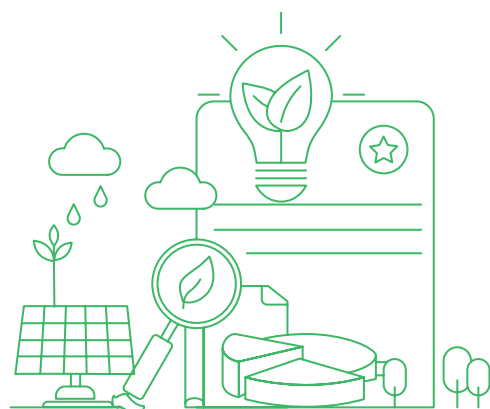
2040

2050

# Issue Targets and Progress

## Management Targets for Each Issue

Jinko Solar has established nature-related management targets and continuously monitors their implementation, collaborating with upstream and downstream partners to implement nature-friendly responsibility concepts and methods. For nature-related issues including climate action, energy utilization, water stewardship, emissions control, waste reduction, and circular economy, the Company has set specific, quantifiable targets with regular progress tracking.



### Management Targets : Climate Action



#### Near-term SBTs

Commit to reducing absolute Scope 1 and 2 GHG emissions 50.4% by 2032 from a 2022 base year

**50.4%**

Reducing Scope 3 GHG emissions from purchased goods and services 58.2% per MW of solar related product produced within the same timeframe

**58.2%**

Increasing active annual source of renewable electricity to **100%** by 2030

#### Long-term SBTs

Commit to reducing absolute Scope 1 and 2 GHG emissions 90% by 2050 from a 2022 base year

**90%**

Reducing Scope 3 GHG emissions from purchased goods and services (Category 1), upstream transportation and distribution and downstream transportation and distribution (Categories 4 and 9) 97% per MW of solar related product produced within the same timeframe

**97%**

#### Net-zero SBT

Commit to reaching **net-zero GHG emissions across the value chain** by 2050



### Management Targets : Energy Utilization



#### Short-term target

Commit to reducing electricity consumption 5% per MW of solar related product produced by 2025 from a 2022 base year

**5%**

#### Mid-to-Long-term target

Commit to reducing electricity consumption 8% per MW of solar related product produced by 2030 from a 2022 base year

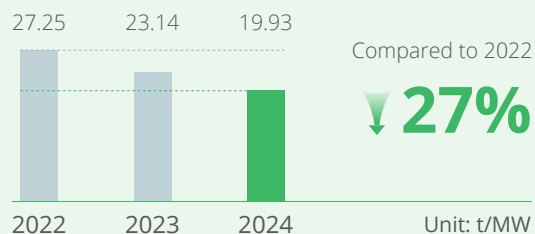
**8%**

Management Targets	Short-term targets	Medium-term targets	Long-term targets
<b>Water Stewardship</b>	Commit to reducing water withdrawal volume 10% per MW of solar related product produced by 2025 from a 2022 base year <b>10%</b>	Commit to reducing water withdrawal volume 15% per MW of solar related product produced by 2027 from a 2022 base year <b>15%</b>	Commit to reducing water withdrawal volume 20% per MW of solar related product produced by 2030 from a 2022 base year <b>20%</b>
<b>Emissions Control</b>	Commit to reducing volatile organic compounds (VOC) emissions 3% per MW of solar related product produced by 2025 from a 2024 base year <b>3%</b>  Reducing wastewater 5% per MW of solar related product produced within the same timeframe <b>5%</b>	Commit to reducing volatile organic compounds (VOC) emissions 7% per MW of solar related product produced by 2027 from a 2024 base year <b>7%</b>  Reducing wastewater 11% per MW of solar related product produced within the same timeframe <b>11%</b>	Commit to reducing volatile organic compounds (VOC) emissions 10% per MW of solar related product produced by 2030 from a 2024 base year <b>10%</b>  Reducing wastewater 15% per MW of solar related product produced within the same timeframe <b>15%</b>
<b>Waste Reduction</b>	Commit to reducing total general solid waste generation 5% per MW of solar related product produced by 2025 from a 2024 base year <b>5%</b>  Reducing total hazardous waste generation 5% per MW of solar related product produced within the same timeframe <b>5%</b>	Commit to reducing total general solid waste generation 11% per MW of solar related product produced by 2027 from a 2024 base year <b>11%</b>  Reducing total hazardous waste generation 11% per MW of solar related product produced within the same timeframe <b>11%</b>	Commit to reducing total general solid waste generation 15% per MW of solar related product produced by 2030 from a 2024 base year <b>15%</b>  Reducing total hazardous waste generation 15% per MW of solar related product produced within the same timeframe <b>15%</b>
<b>Circular Economy</b>	Commit to achieving a 70% recycling rate for recyclable materials such as pallets and auxiliary fillers in production and transportation by 2025 <b>70%</b>	Commit to achieving a 80% recycling rate for recyclable materials such as pallets and auxiliary fillers in production and transportation by 2026 <b>80%</b>	Commit to achieving a 90% recycling rate for recyclable materials such as pallets and auxiliary fillers in production and transportation by 2028 <b>90%</b>

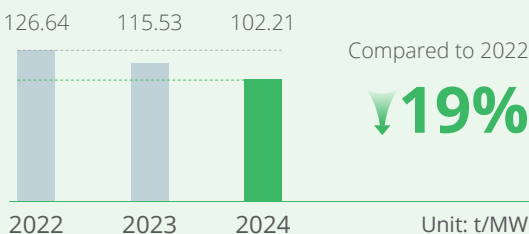


## Key Progress on Each Issue

GHG emission intensity (Scope 1 and 2)



GHG emission intensity (Scope 3, Category 1)

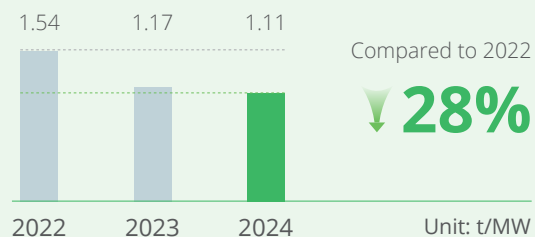


Volatile organic compounds (VOC) emission intensity

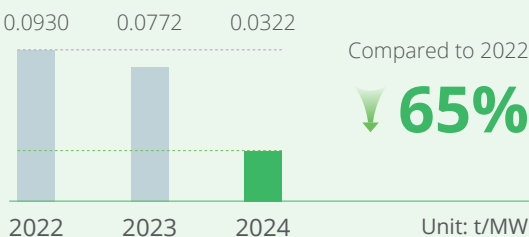


**0.49** kg/MW

General solid waste generation intensity



Hazardous waste generation intensity

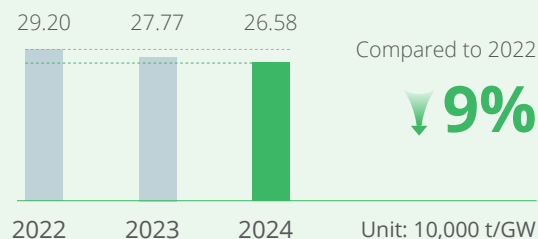


Total general solid waste recycled/reused

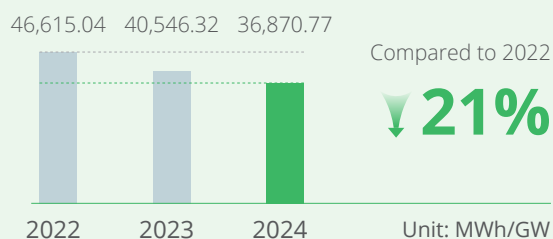


**164,431.97** t

Water withdrawal intensity



Electricity consumption intensity



Total hazardous waste recycled/reused



**3,962.96** t

# Appendices

## TNFD Index

Elements	Recommended Disclosures	Sections
Governance	A. Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.	• Strengthening Governance Framework
	B. Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.	• Strengthening Governance Framework
	C. Describe the organization'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 organization's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.	• Strengthening Governance Framework • Consolidating Comprehensive Governance
Strategy	A. Describe the nature-related dependencies, impacts, risks and opportunities the organization has identified over the short, medium and long term.	• Impact Dependency Analysis • Risk and Opportunity Management
	B. Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organization's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.	• Risk and Opportunity Management • Environment-Friendly Operations • Synergistic Green Value Chain Development • Diversified Green Products
	C. Describe the resilience of the organization's strategy to nature-related risks and opportunities, taking into consideration different scenarios.	• Risk and Opportunity Management • Resilience Transformation Initiatives
	D. Disclose the locations of assets and/or activities in the organization's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations.	• Impact Dependency Analysis • Risk and Opportunity Management

Elements	Recommended Disclosures	Sections
Risk management	A(i). Describe the organization's processes for identifying, assessing and prioritizing nature-related dependencies, impacts, risks and opportunities in its direct operations.	• Impact Dependency Analysis • Risk and Opportunity Management
	A(ii). Describe the organization's processes for identifying, assessing and prioritizing nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).	• Resilience Transformation Initiatives
	B. Describe the organization's processes for managing nature-related dependencies, impacts, risks and opportunities.	• Resilience Transformation Initiatives
Metrics and targets	C. Describe how processes for identifying, assessing, prioritizing and monitoring nature-related risks are integrated into and inform the organization's overall risk management processes.	• Resilience Transformation Initiatives
	A. Disclose the metrics used by the organization to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.	• Risk and Opportunity Management
	B. Disclose the metrics used by the organization to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.	• Impact Dependency Analysis
	C. Describe the targets and goals used by the organization to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.	• Overall Goals and Progress • Issue Targets and Progress

## IFRS S2 Index

Elements	Recommended Disclosures	Sections
Governance	The governance body(s) (which can include a board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities.	• Strengthening Governance Framework
	Management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities.	• Strengthening Governance Framework
Strategy	The climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects.	• Risk and Opportunity Management
	The current and anticipated effects of those climate-related risks and opportunities on the entity's business model and value chain.	• Risk and Opportunity Management
	The effects of those climate-related risks and opportunities on the entity's strategy and decision-making, including information about its climate-related transition plan.	<ul style="list-style-type: none"> <li>• Risk and Opportunity Management</li> <li>• Environment-Friendly Operations</li> <li>• Synergistic Green Value Chain Development</li> <li>• Diversified Green Products</li> </ul>
	The effects of those climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period, and their anticipated effects on the entity's financial position, financial performance and cash flows over the short, medium and long term, taking into consideration how those climate-related risks and opportunities have been factored into the entity's financial planning.	• Risk and Opportunity Management
	The climate resilience of the entity's strategy and its business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities.	<ul style="list-style-type: none"> <li>• Risk and Opportunity Management</li> <li>• Resilience Transformation Initiatives</li> </ul>

Elements	Recommended Disclosures	Sections
Risk management	The processes and related policies the entity uses to identify, assess, prioritize and monitor climate-related risks.	<ul style="list-style-type: none"> <li>• Consolidating Comprehensive Governance</li> <li>• Resilience Transformation Initiatives</li> </ul>
	The processes the entity uses to identify, assess, prioritize and monitor climate-related opportunities, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities.	• Risk and Opportunity Management
	The extent to which, and how, the processes for identifying, assessing, prioritizing and monitoring climate-related risks and opportunities are integrated into and inform the entity's overall risk management process.	• Resilience Transformation Initiatives
Metrics and targets	Information relevant to the cross-industry metric categories.	• Issue Targets and Progress
	Industry-based metrics that are associated with particular business models, activities or other common features that characterize participation in an industry.	• Issue Targets and Progress
	Targets set by the entity, and any targets it is required to meet by law or regulation, to mitigate or adapt to climate-related risks or take advantage of climate-related opportunities, including metrics used by the governance body or management to measure progress towards these targets.	<ul style="list-style-type: none"> <li>• Overall Goals and Progress</li> <li>• Issue Targets and Progress</li> </ul>





**Optimize the Energy Portfolio and Take Responsibility  
for Enabling a Sustainable Future**

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