

# Corporate Branding Manual

# RE100

In 2019, we joined the RE100 green initiative and committed to sourcing 100% of our operational electricity from clean energy by 2028.

[www.jinkosolar.com](http://www.jinkosolar.com)

**10,000 years of humanity**

**5,000 years of civilization**

**200 years of industry**

**100 years of warming**

**X years of recovery**

**How much time do we have left?**

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In the mid-century of this century, as outlined in the Paris Agreement, the Earth's temperature needs to be controlled within 1.5 degrees Celsius. Since the end of the 19th century, the Earth has already warmed by 1.2 degrees Celsius, with 0.9 degrees Celsius of that increase occurring in the past 30 years.

70% of carbon emissions come from coal, with 80% of coal being used for electricity generation. Only by altering the energy structure can a sustainable future become possible.

A carbon-free Earth powered entirely by clean energy would require 20 terawatts (TW) of solar power, 10 TW of wind power, and 24 terawatt-hours (TWh) of energy storage. These needs are achievable with only half the investment required for traditional fossil fuels and would occupy just 0.2% of the land area.



# Photovoltaics will become the primary energy source

**34%**

Photovoltaic power generation proportion in 2050.

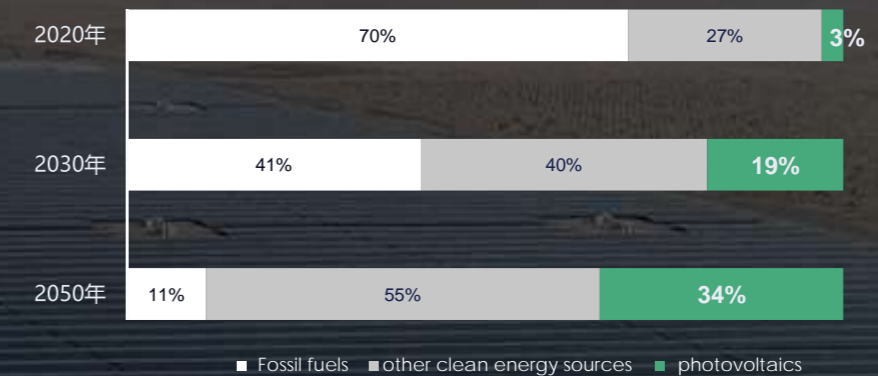
**80%**

Proportion of new installed capacity in 2030.

According to IEA data, the global share of solar photovoltaics in the energy mix will rise from 3% in 2022 to 34% in 2050. The annual addition of installed capacity will increase from 50% in 2022 to 80% in 2030. Solar photovoltaics will transition from being a supplementary energy source to becoming a primary energy source.

The world is undergoing a transition to clean energy sources.

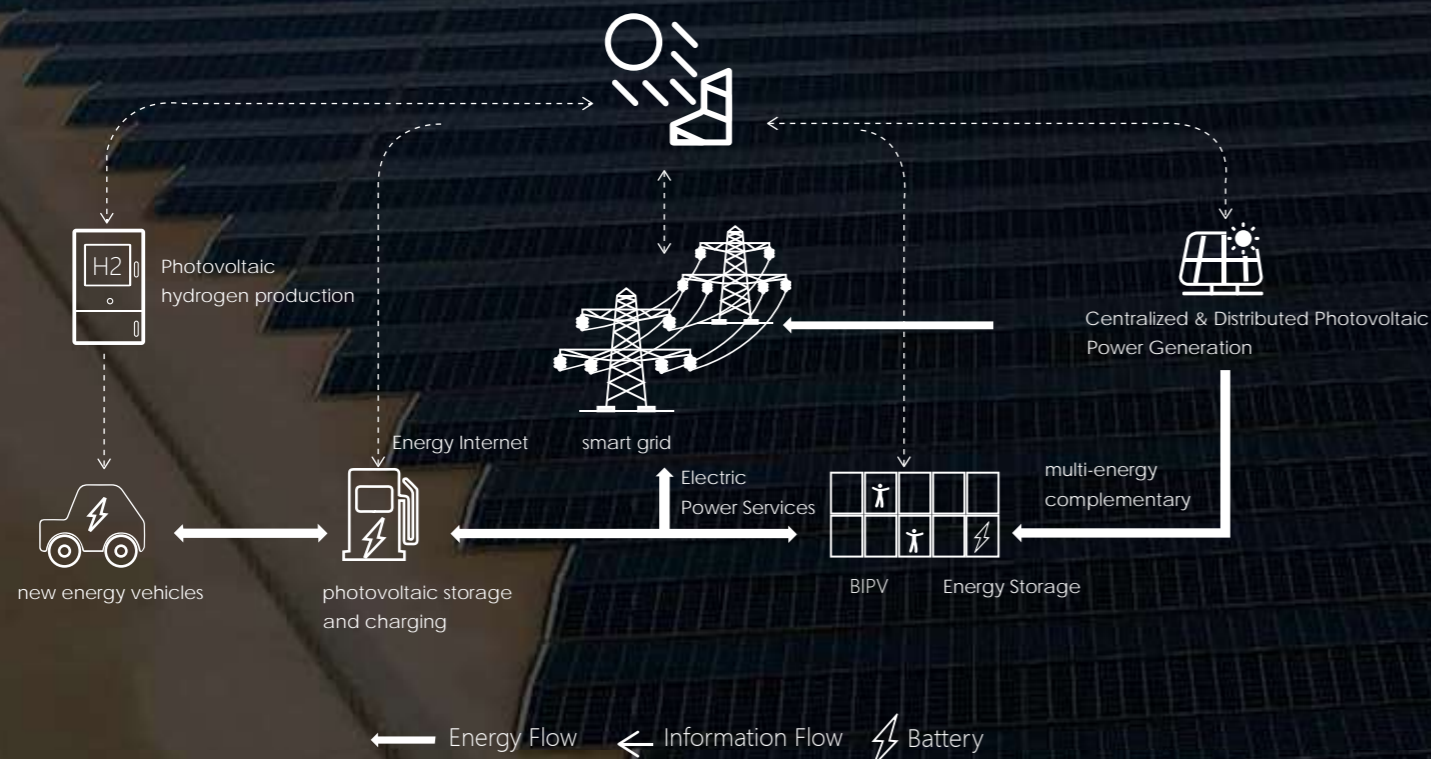
Global energy supply structure.



Source:Net Zero by 2050,IEA

In a scenario of achieving global net-zero emissions, the proportion of renewable energy generation could reach close to 90% by 2050. The share of photovoltaics could increase from 3% to 34%, making it one of the key drivers in the energy transformation.

In 2022, the global new installed photovoltaic capacity accounted for over 50% of the total new installed capacity.



## Photovoltaic has become the most economical and growth-oriented energy source



Source:Infolink

# Photovoltaic-based New Energy System

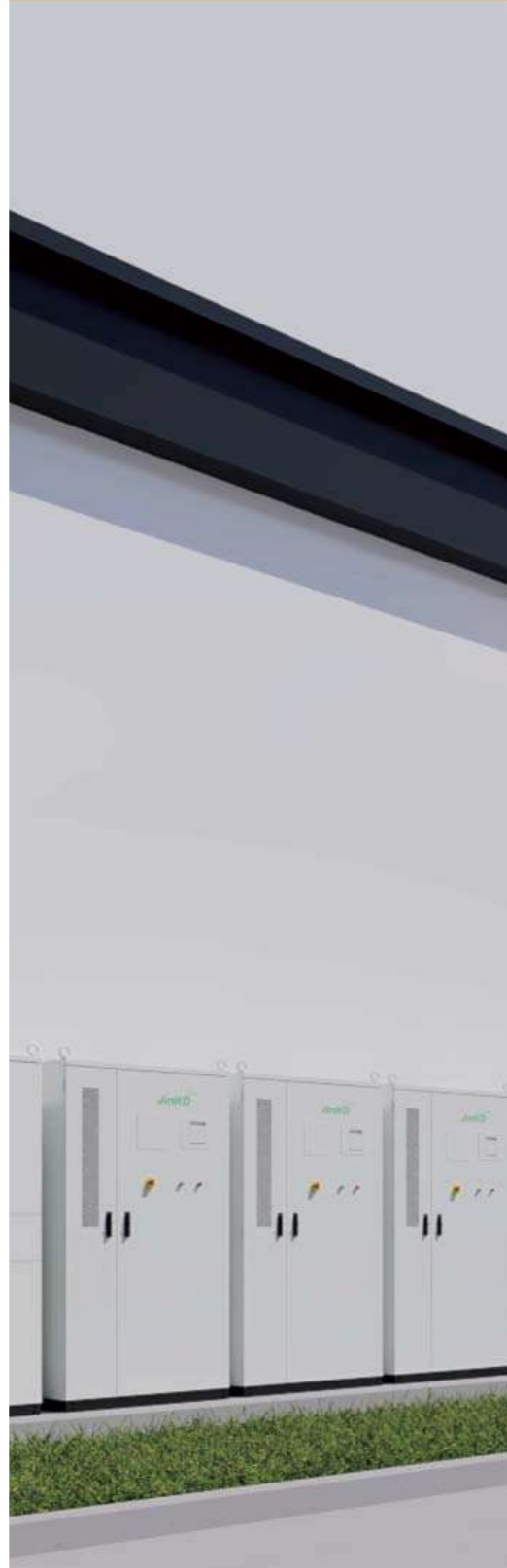
Photovoltaic  
Power Generation



Smart Grid



Smart  
energy storage



Zero  
carbon cities



Energy Internet



Zero  
Carbon Economy





晶科能源

JinkoSolar (Stock Code: 688223) is a globally leading manufacturer of photovoltaic modules and energy storage products. With the mission of "Changing the Energy Portfolio and Taking Responsibility for the Future," the company is dedicated to accelerating the global transition towards sustainable energy, addressing the most urgent challenges posed by climate change. JinkoSolar ranks among the Hurun Top 50, Fortune China 500, and MIT Technology Review's 50 Smartest Companies globally. As the first company to exceed **230GW** in module shipments, it holds a global market share of **15%** and secures the top position in the market share of eight out of the top ten photovoltaic markets worldwide.



## Company Honors

- Ranked 163rd in the Fortune Global 500
- Included in the 2022 Hurun Top 50 Chinese Companies
- Featured in the Fortune China 500 list for 8 consecutive years
- Recognized for 8 consecutive years as the "Most Financeable" Photovoltaic Brand by Bloomberg New Energy Finance
- Constituent of the SSE "STAR 50 Index" and "Shanghai Stock Exchange Sci-Tech Innovation Board Growth Index"
- Forbes China - Top 50 Innovative Enterprises
- Harvard Business Review - Annual Enterprise Award for Digital Transformation
- China Federation of Industry and Commerce - Top 500 Chinese Private Enterprises
- China Federation of Industry and Commerce - Top 500 Chinese Private Manufacturing Enterprises

**Bloomberg NEF**

01

# Technology

High research and development investment, building a long-term competitive advantage in technology and products.

*Every ray of sunshine should not be wasted*

# Leading Technology

**25** times break the world record

The conversion efficiency of the perovskite tandem solar cell based on N-type TOPCon reaches **32.33%**。

N type tandem cell  
**32.33%**

25



**3544**  
authorized  
patents



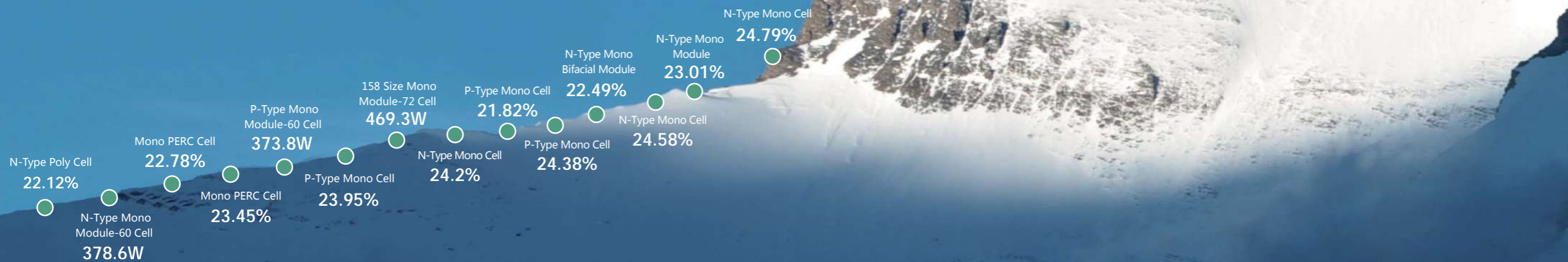
**2143**  
Invention  
Patents



**2320**  
A research and  
development  
team of 2000



**6.899billion**  
R&D Team R&D  
Investment





## Technology Awards

Top 100 Patents in the New Energy Industry

Top 500 Private Enterprises in R&D Investment and Invention Patents

MIT's Global 50 Smartest Companies

Forbes China - Top 50 Most Innovative Enterprises with Green and Efficient TOPCon Technology

Forbes China 2021 Annual Most Promising Clean Energy Technology Award

National Ministry of Industry and Information Technology's Green Design Product Showcase

Technology Patents: 1,464 utility patents, 323 invention patents;

ranked first in patent value within the industry.

In 2022, the All-China Federation of Industry and Commerce (ACFIC) released the authoritative list of Top 500 Private Enterprises in R&D Investment and Invention Patents.

JinkoSolar claimed the top position for invention patents among photovoltaic component companies.

JinkoSolar secured the top spot for Chinese enterprises on the IPRdaily Global Solar Cell Patent Rankings, affirming its leadership in solar photovoltaic technology patents.



## Industry-Academia Collaboraion Advancing

Industry-academia collaboration, deepening synergies with more than 10 partner institutions including the Australian National University and Shanghai Jiao Tong University. Collaborative innovation efforts involve partnerships with academic and research institutions both domestically, such as Tsinghua University, Jiao Tong University, Sun Yat-sen University, Zhejiang University, as well as internationally, including the University of New South Wales in Australia and the National University of Singapore.

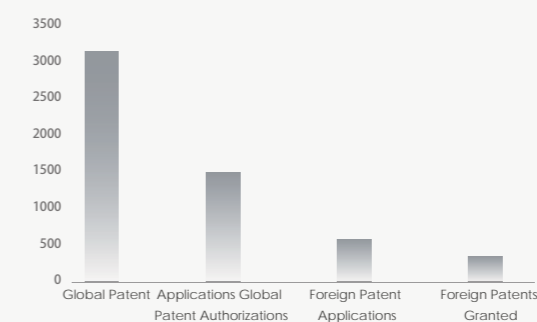


### Core Technologies

- Low-oxygen
- Low-concentration N-type Monocrystalline Technology
- N-type Silicon Wafer Thin Slicing Technology
- N-type HOT2.0 Cell Technology

### Patent Authorization

JinkoSolar's Domestic and International Patent Portfolio



Rank	Applicant
1	LG Group
2	JinkoSolar
3	AIKO Solar Energy Technology
4	Canadian Solar
5	Panasonic
6	Samsung
7	LONGi
8	Sony
9	KANEKA CORPORATION
10	The French Alternative Energies and Atomic Energy Commission



02

# Manufacturing

Integrated Scale,  
Systematic Management,  
Strong Execution Capability

*Every module is  
meticulously crafted*

# Product Certifications

AAA Grade: Awarded the highest financing rating of 3A grade by PV ModuleTech.

Won the "Quality Exceeds China" Single Crystal Array Power Simulation Award from TÜV Rheinland Germany for five consecutive years.

Recognized as "Top Performer" for nine consecutive years in PVEL/DNV GL PV Module Reliability Scorecard.

Received the "Top Photovoltaic Brand" badges from EuPD Research for Europe, Australia, South Africa, the Middle East, and North Africa.

Received the National Market Credit Quality AAA, User Satisfaction Benchmark, and National Quality Benchmark awards.

Achieved "Best Performer" status from third-party authority PVEL for eight consecutive years.

Ranked first for five consecutive years in the TÜV Rheinland "Quality Exceeds China" competition.

## Smart Manufacturing

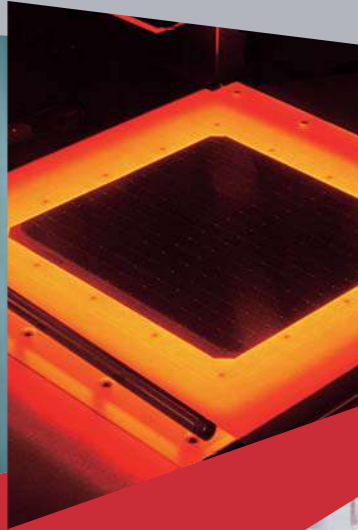
JinkoSolar's "Intelligent Factory" employs nearly 100% automation in production, effectively reducing operational costs. The fully automated production process in unmanned manufacturing workshops includes autonomous delivery vehicles for silicon wafers and solar cells, optimized path-finding systems for automated material handling, fully automated production lines for cells and modules, as well as precise production control.



# Vertical Integration



silicon wafer



Battery



Component

## Leading Enterprise in Integrated Components, N-type Leading Technological Transformation in the Industry, Simultaneous Progress in Research and Development, and Expansion of Production.

Accumulated shipment volume consistently holds the top position, with continuous expansion of integrated production capacity. As of 2024 Q1, the company's accumulated shipment volume reached 230 GW, making it the world's first to exceed 230 GW.

Capacity enhancement is balanced, and integrated scale and efficiency continue to improve. By the end of 2024, the company possesses silicon wafer capacity of 120GW, cell capacity of 110GW, and module capacity of 130GW, including 55GW of N-type modules, ranking first globally.

The accelerated production of N-type TOPCon solar cells gives the company a pioneering advantage. The company was among the earliest in China to mass-produce N-type modules. In 2018, the company invested in establishing a pilot line for N-type cells, followed by a GW-level N-type cell trial production line in 2019. In 2022, the company's laboratory achieved an efficiency of 26.89% for N-type monocrystalline cells, which stabilized at 26.1% during Q1 2024 in mass production.

Accelerating the expansion of N-type capacity solidifies the company's leading position in the industry. The first phase of the 56GW N-type TOPCon integrated project in Shanxi, with a capacity of 14GW, is scheduled for production in Q1 2024. It is anticipated that the 56GW capacity will reach full production by 2025.

## Excellence in Manufacturing

The foundation of Jinko Solar's manufacturing excellence goes beyond abundant integrated production capacity. It includes the ability to actively meet diverse customer needs, optimized production schedule management, rapid mass production of new technologies while maintaining high product yield, on-time delivery – all of which constitute the core strengths of Jinko in the manufacturing domain.

## Rapid Yield Improvement

Achieving rapid yield control for new products within the shortest possible time is facilitated by the company's highly refined technology transfer process, enabling swift integration of R&D's new technologies into production and shortening the yield learning curve for next-generation technologies.

Across different manufacturing facilities, effective yield loss prevention systems and yield variance analysis systems are employed to ensure yield stability.

Leveraging its technological and process advantages, along with exceptional manufacturing capabilities and experience, Jinko Solar maintains a continuous increase in TOPCon yield. The overall yield for Jinko Solar's TOPCon technology ranges between 98-99%, on par with PERC cell yields, thanks to the company's technological prowess and manufacturing excellence.

## Flexible Production Management

Jinko Solar employs a flexible production management approach to meet the diverse product demands of its extensive customer base and various application scenarios. This strategy enables the company to serve over 3,000 customers in more than 170 countries worldwide.

## Optimized Production Schedule

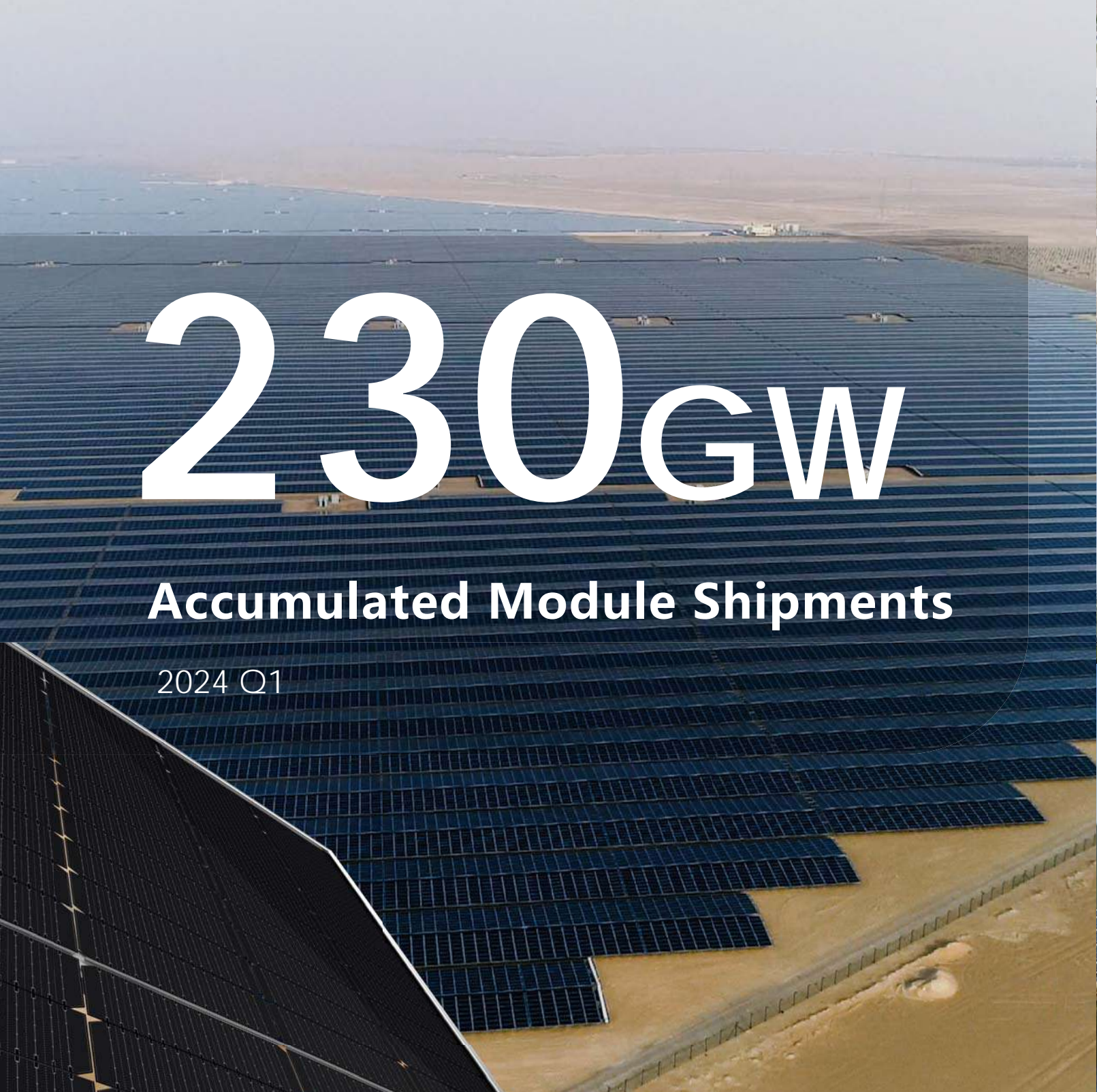
Following the commissioning of the 56GW Shanxi N-type integrated mega-facility project, Jinko Solar aims to establish new production schedule benchmarks for module products. This will be achieved through an integrated planning system encompassing ingot pulling, wafer slicing, cell manufacturing, and module production, along with the utilization of advanced factory automation capabilities.

03

*Each delivery resonates  
with certainty*

## Product

Continuous Leading Product  
Strength is the Differentiation  
of Jinko Solar.



# 230GW

## Accumulated Module Shipments

2024 Q1



### N-type TOPCon Modules

**635W**

Higher Power

**23.5%**

Higher Efficiency

**0.4%**

Linear Degradation

**80±5%**

Higher Bifacial Yield

**30年**

Ultra-Long Power  
Warranty

**-0.29%/°C**

Temperature Coefficient

# Energy Storage System

# 100+

## Completed Projects

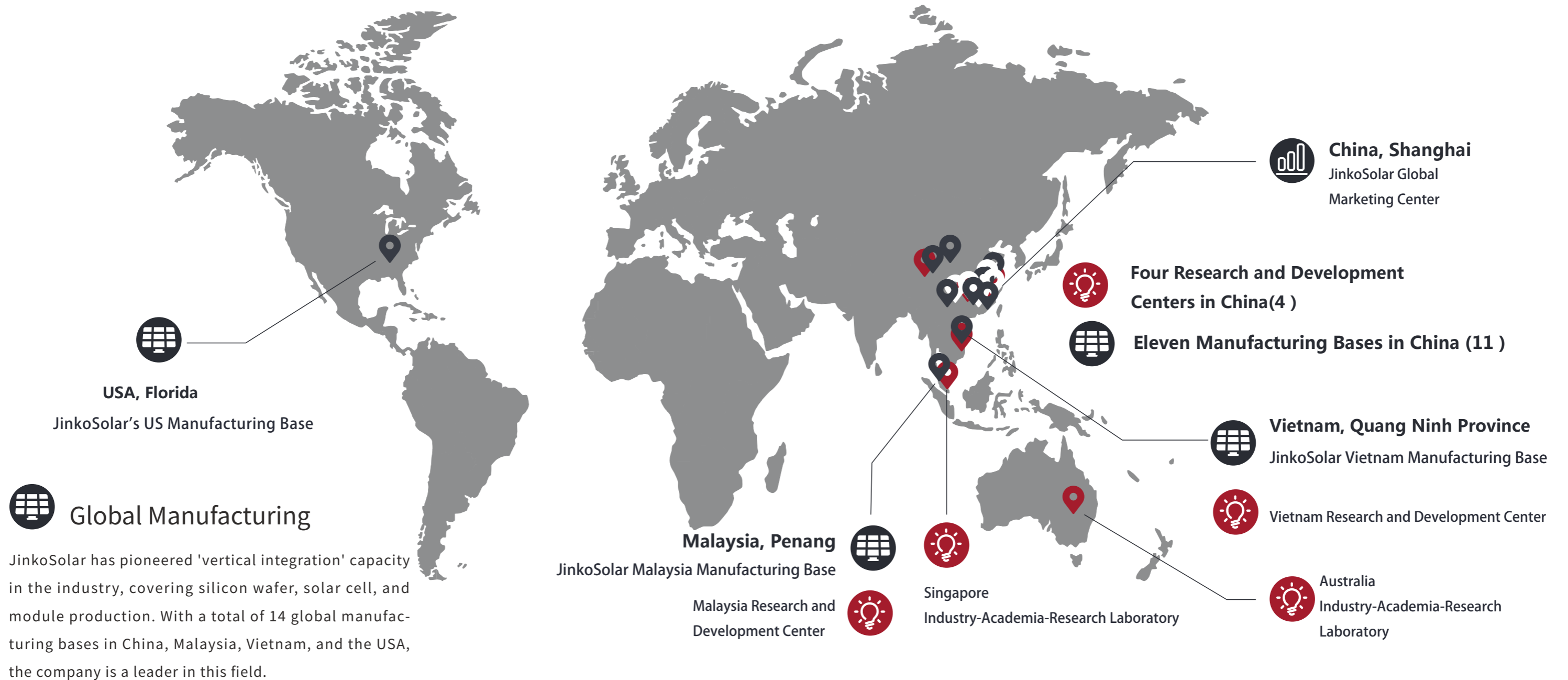


## JinkoSolar's Self-developed Liquid Cooling Energy Storage System

Jinko Solar introduces the concept of "Safe and Intelligent Energy Storage," building a multi-level collaborative control strategy to break free from the traditional challenges of low efficiency, high risk, and difficult maintenance in energy storage. The company designs and manufactures the SunTank residential energy storage system with "high sensitivity, high perception, self-management, self-assessment, and self-decision-making," along with the SunGiga commercial liquid cooling energy storage system and the SunTera large-scale liquid cooling energy storage system.



# Global Manufacturing and Global Research and Development



## Global Research and Development

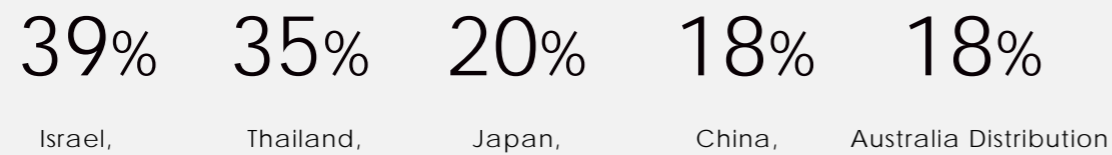
JinkoSolar possesses a globalized research and development capability. The company has established research centers in various locations including Haining and Shangrao in Zhejiang and Jiangxi provinces of China, Leshan in Sichuan, Xining in Qinghai, Malaysia, and Vietnam. Additionally, it has set up industry-academia-research joint research laboratories in Singapore and Australia.



# JinkoSolar's Dominant Market Share in Key Markets

From China to worldwide markets, spanning module components to integrated solar storage solutions, Across customer segments (over 3000 global clients), And product categories (highest efficiency, best value N-type products), achieving dual-dimensional resonance.

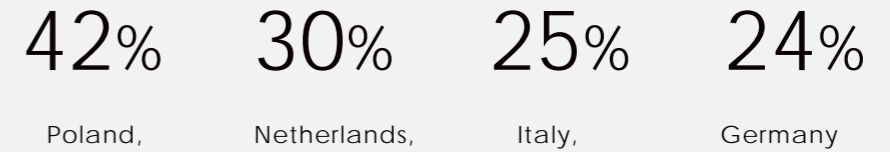
## Asia-Pacific Region



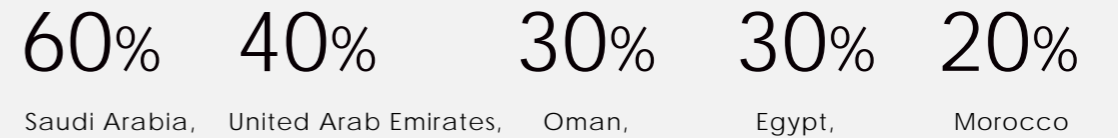
## The Americas



## Europe



## Middle East, Africa



## Global Strategic Clients





## Efficient Production Cycle and Delivery Capability

Customers rely on Jinko's product delivery capability and ability to meet short-cycle demands. JinkoSolar's production cycle is highly competitive compared to industry-leading benchmark manufacturers. Thanks to comprehensive planning systems and high levels of automation, its smart factories in Shangrao and Florida continually break production cycle records.

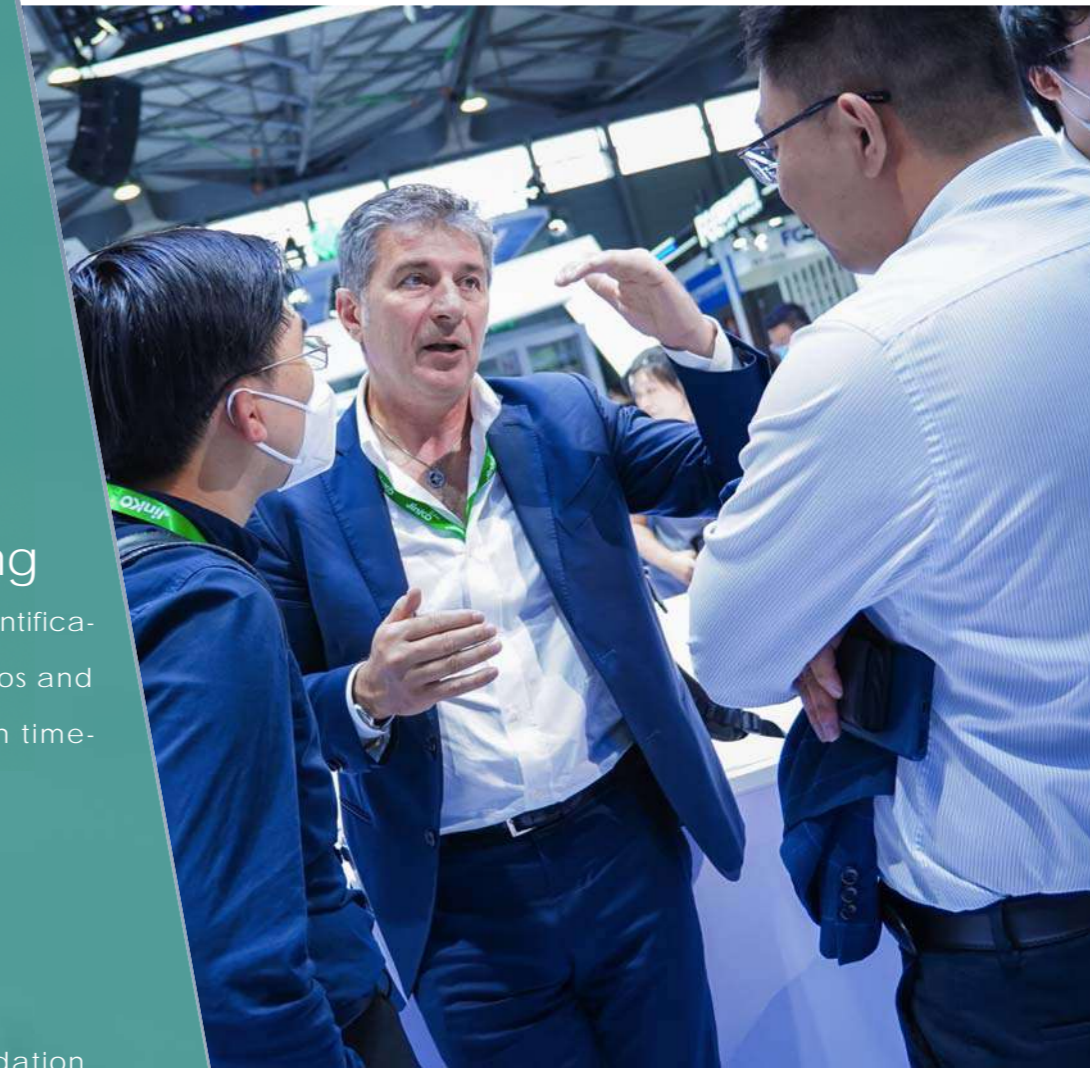
JinkoSolar provides reliable on-time delivery services to customers. The company has redesigned its order processing system and developed state-of-the-art production planning and scheduling systems, further enhancing delivery accuracy. JinkoSolar places stringent demands on accuracy; deliveries must be neither too early nor too late, as both could impact customers' project deployment and schedule management.

## Visualized Monitoring

Utilizing barcodes for precise identification, real-time production videos and videos from specific production time-frames can be downloaded.

## Process Parameter Monitoring

Using smart factories as a foundation, intelligent process parameter monitoring is achieved, encompassing process parameters, quality control plans, work standards, and more. This system also includes risk forecasting and early warning capabilities.



Integrated Order Data Integrating visual monitoring, MES (Manufacturing Execution System), SAP, and GQCS (Global Quality Control System), among the four major systems, to provide data support for online intelligent manufacturing monitoring.

## Real-time Manufacturing Transparency

Tailoring personalized online intelligent manufacturing monitoring services to customer needs. Offering on-demand, real-time, and efficient access to five categories of monitoring information: live video, order details, production data, scheduling updates, and quality insights.

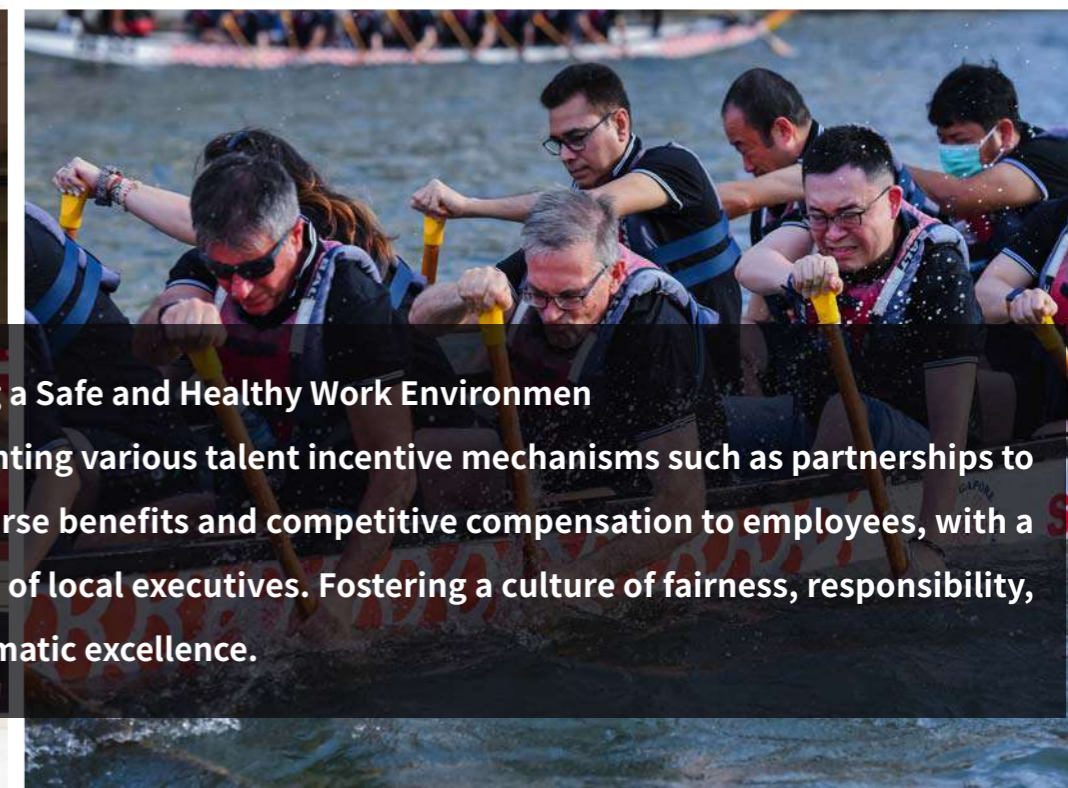
04

# Globalization

From global sales to global manufacturing,  
and then to global investment.

*Every resource is  
globally allocated*

# Attracting Global Talent



Providing a Safe and Healthy Work Environment  
Implementing various talent incentive mechanisms such as partnerships to offer diverse benefits and competitive compensation to employees, with a 38% ratio of local executives. Fostering a culture of fairness, responsibility, and pragmatic excellence.

05

# Ecological Chain

The industrial ecosystem is the open framework of Jinko.

*Every partner thrives in a win-win ecosystem.*



3,000

Jinko Suppliers

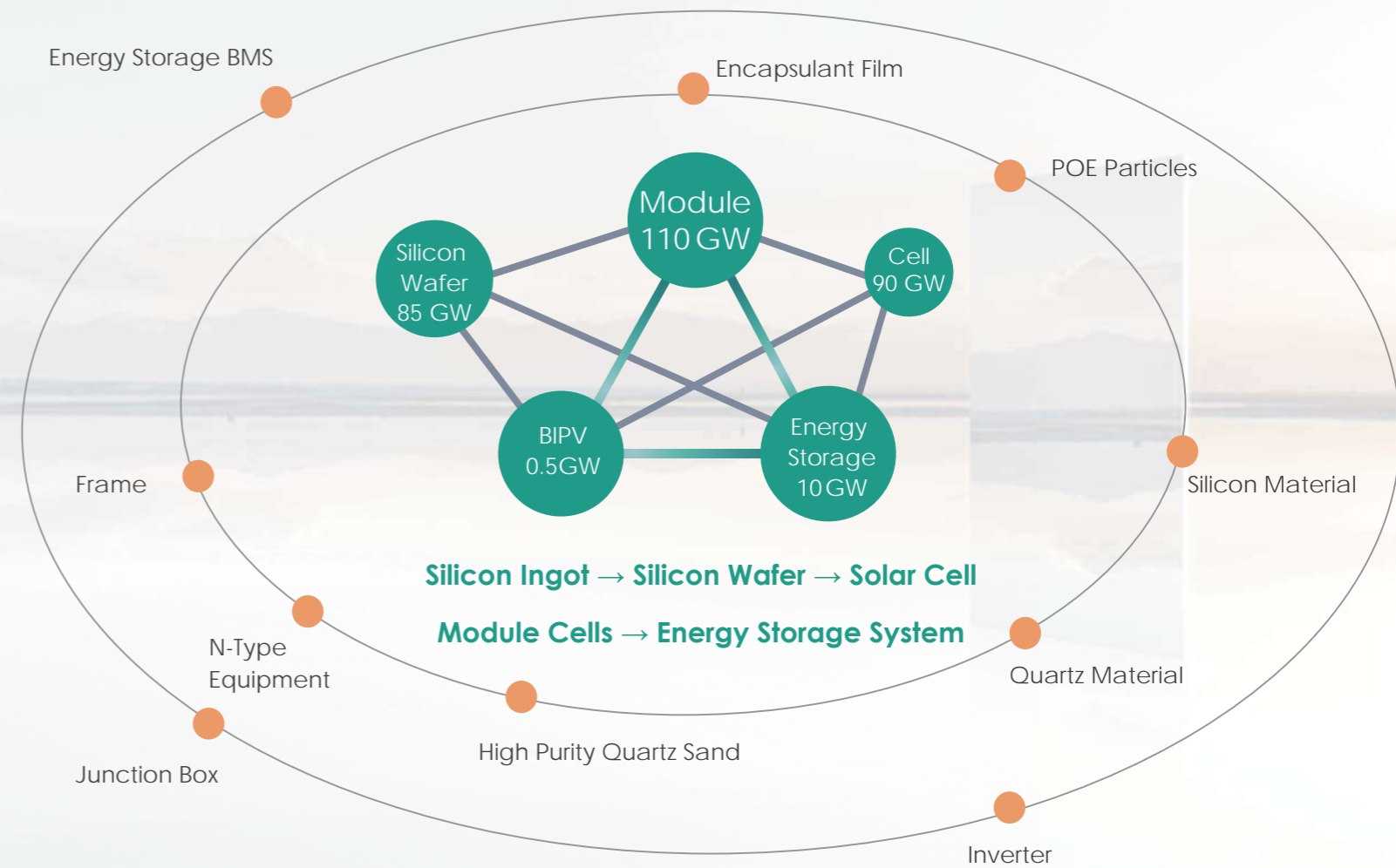
10,000

Industry Suppliers

JinkoSolar Holdings is a publicly listed company on the U.S. stock market, serving as an advanced investment platform in the clean energy sector. It has strategically invested in leading enterprises across various segments within the photovoltaic industry ecosystem. Leveraging the position of its flagship enterprise, JinkoSolar, the company selects strategic partners from its own suppliers as well as over 10,000 industry suppliers, nurturing new industrial opportunities through capital and technological empowerment.

With its leadership status, JinkoSolar Holdings fosters industry growth and expansion by deploying industrial projects domestically and internationally, thereby creating clusters of industries to enhance global competitiveness in the field of new energy.

## Jinko Ecological Chain Blueprint



### New Technologies

Continuously building the ecosystem, collaborating with top domestic and international institutions to incubate new technologies.



### New Equipment

From research and development to ecosystem and industrial implementation of new technologies, collaboration with numerous equipment suppliers is essential. During the process of digital transformation, Jinko is bringing in more strategic partners.



### New Materials

The emergence of new technologies often brings forth new material suppliers. Jinko invests in new material companies to overcome the industry's material limitations encountered during development.



### New Models

The development of photovoltaic renewable energy will introduce many new electricity business models. Jinko is focused on numerous new business models, including energy storage and building-integrated photovoltaics (BIPV), which present future investment opportunities.

## Compliant Operations for Sustainable Development

Rooted in risk management, we adhere to a compliance-driven approach for procurement and operations. Our supply chain system leads the industry in establishing a team of sustainable development experts. Through system construction, process implementation, and project integration, we are progressively achieving a competitive edge through a sustainable supply chain.

Drawing on international and domestic standards as well as industry best practices, we have updated and formulated supply chain partner behavior guidelines. We've also provided related action guidelines and self-assessment questionnaires. Achieving a 100% signing rate for the supplier behavior guidelines, we have innovatively established the 'CARE' framework to comprehensively manage ESG risks across the supply chain.

## Digital Innovation for Efficient Empowerment

We've developed a three-year strategic plan for the supply chain system, focusing on strengthening internal capabilities and pursuing the goals of 'efficiency enhancement, cost reduction, compliance, and development'. We're aligning with organizational, process, and policy requirements, unifying design, and implementing step-by-step construction of a self-controlled integrated supply chain platform. This approach achieves short-term victories and enables continuous iteration in the supply chain business.

Through the platformization of core business processes, we have achieved efficient digitized management of demand planning, sourcing, supplier onboarding, contract advancement, order delivery, and financial settlement. With the launch of the integrated platform, we're accelerating the learning and application of digital innovation in the supply chain system, fostering a 'Continuous Learning Team'.

## Deepening Collaboration for Value Co-creation

The supply chain system plays a pivotal role in JinkoSolar's entire value chain, serving as a bridge between upstream and downstream activities. We collaborate with over 2000 suppliers worldwide.

As industry experts, the supply chain system delves into various procurement categories, uncovering industry potential. While adhering to Jinko's strategic goals, we deepen strategic collaborations with top suppliers in different categories, fostering win-win outcomes.

With a global presence, we rigorously select the best options, employing the principles of 'strict admission, process management, results orientation, and shared value.' The supply chain system delivers products and services of higher value to Jinko's customers.



## Green and Low-Carbon Future Ahead

As a global leader in green energy supply, in response to the national '30-60' vision, Jinko has committed to adopting Science-Based Targets (SBT) to achieve green and low-carbon operations. Notably, the supply chain system bears 84% of the Group's total carbon emissions (Scope 3).

To continuously build a 'Green Supply Chain,' the supply chain system collaborates with suppliers to establish emission reduction directions, define reduction targets, co-create reduction pathways, and set short to long-term carbon reduction roadmaps. This effort supports JinkoSolar's Net Zero' goal.

Simultaneously, driving the transmission upstream to suppliers, collaborating with stakeholders, and leading the low-carbon philosophy and green operations across the entire value chain, ultimately achieving a broader scope of 'carbon neutrality'.

06

# ESG

Global Impact and Fair  
Responsibility form the  
foundation of Jinko's brand.

***Every responsibility is  
fulfilled without hesitation***

## Addressing Climate Change

# 230 GW

With the mission of “Changing the energy portfolio and taking responsibility for the future” and through continuous technological innovation and a globalized approach, we're creating a new value chain within the photovoltaic ecosystem. We strive to become an industry benchmark. By reducing the world's reliance on the grid through solar and energy storage products, we're helping each user take the first step towards reducing carbon emissions.

With an annual production of 230 GW of modules, it can generate clean electricity of **495.1 billion kWh**, equivalent to meeting the annual electricity needs of over **255 million** households.

This could save **151.01 million tons** of standard coal, which is comparable to planting **3.1 billion trees**.

Additionally, it could save **6.35 million tons** of water, reduce emissions of **15,848 tons** of particulate matter, **79,212 tons** of sulfur dioxide, **41.176 million tons** of carbon dioxide, and **88,631 tons** of nitrogen oxides.

This is akin to planting forests on **112.8 million** hectares of land.



# Joining the United Nations Global Compact

In 2021, JinkoSolar officially announced its membership in the United Nations Global Compact.

In February 2022, JinkoSolar was selected for the first time to receive the 'Best Business Practices in Achieving Sustainable Development Goals 2021' award from the United Nations Global Compact Network China.

On March 1, 2022, JinkoSolar engaged in a high-level dialogue with the Asia-Pacific Regional Representative of the United Nations Global Compact.

## ESG Honors

Ranked among Forbes China's Top 50 Sustainable Development Enterprises in 2023

Recognized as an Outstanding ESG Practice Case by the China Listed Companies Association in 2022

Awarded Ernst & Young's Best Sustainable Development Annual Award in 2022

Acknowledged as an Outstanding Enterprise in 2022

Included in the '2022 Harvard Business Review China's New Growth ESG Innovation Practice List'

Nominated for the ESG Annual Innovation Experiment List by Wall Street News in 2022



## Donation for Education

A donation of 20 million RMB was made to establish the Qingmiao Elementary School in Hengfeng County.



## Illuminating the World with Photovoltaics

Building photovoltaic power stations around the world to provide clean energy for homeless families.



## Fighting Against the Epidemic

A donation of 12 million RMB was made for epidemic relief, and a global million-face mask donation initiative was implemented.

