N-type Era for the Notch Above

JinkoSolar Business updates

Sep 27,2023

Operating and Financial Highlights

No.1 **cumulative module shipments**

165 GW

No.1 **1H module shipments**

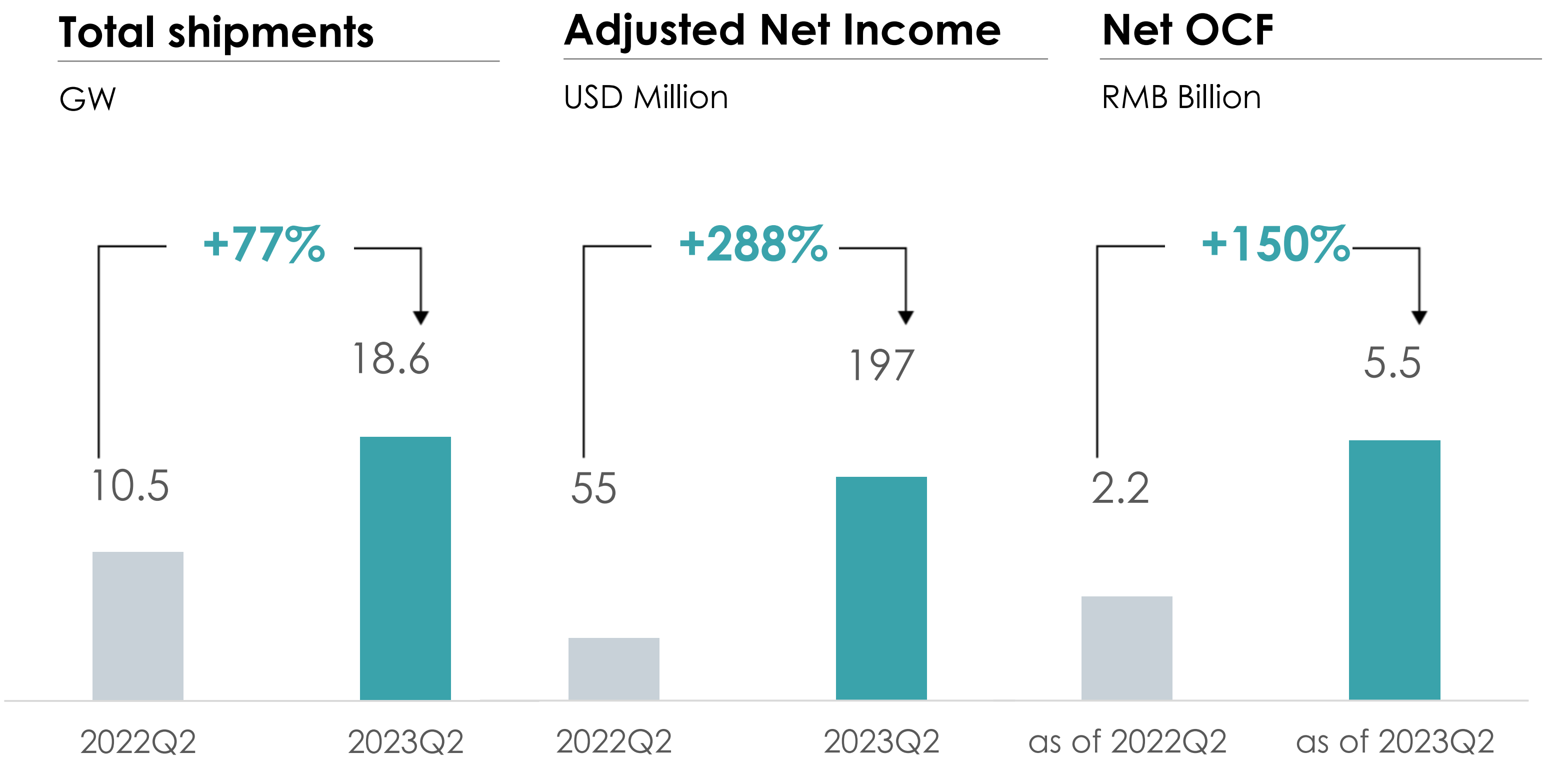
30.8 GW

No.1 **1H N-type module shipments**

~50%

No.1 **N-type cell capacity by the end of 2023**

70 GW+

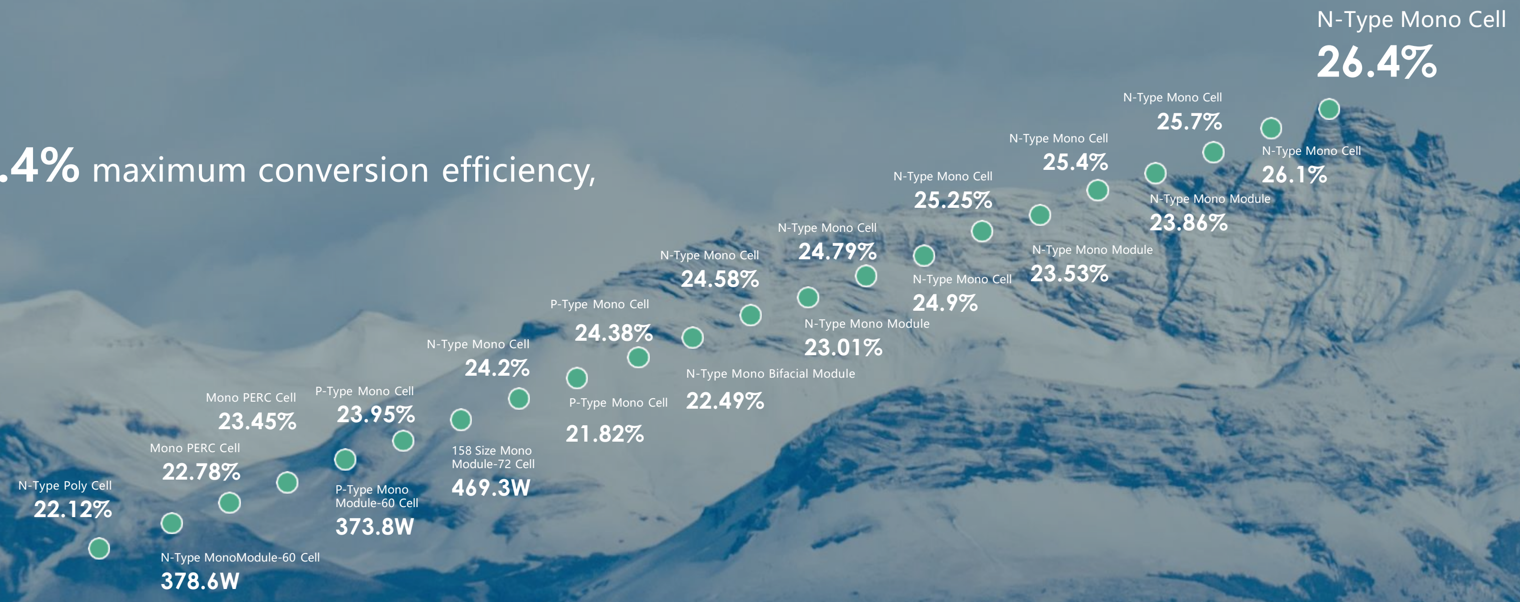


- Recently announced cash dividend with approximately US$77 million to be distributed, US$1.50 per ADS.

Leading-edge Technology

World record broken **22 times**

182 N-type TOPCon cell reaches **26.4%** maximum conversion efficiency, setting a new world record



1702
Granted Patents

409
Number of Patents

2278
R&D Team

5.615 Billion RMB
R&D Investment in 2022

- **Core Technology**

  Low Oxygen and Low Concentric Circles Rate N-type Monocrystalline Technology

  N-type Silicon Wafer Thinning Technology

  N-type HOT 2.0 Cell Technology

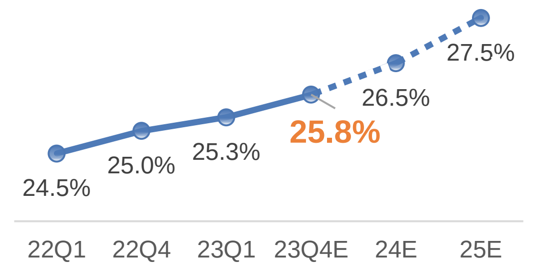
  Tiger Neo Module Technology

  BIPV technology, etc.

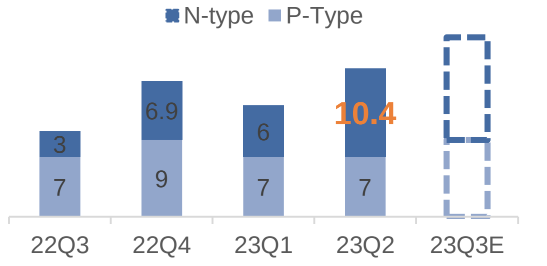
- **Extensive R&D for PV and related technologies**

Pioneering the N-type Era

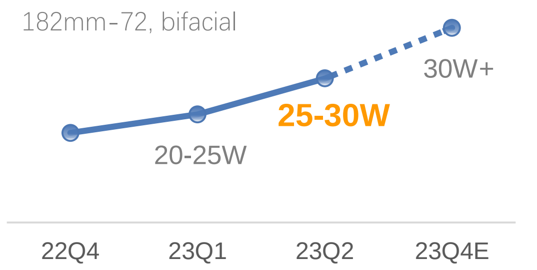
Mass-production cell efficiency



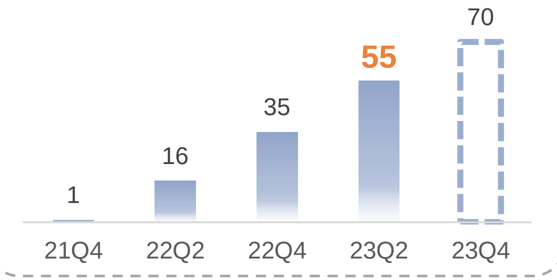
Quarterly module shipments (GW)



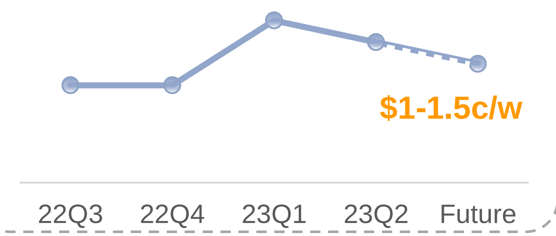
Module power output advantage



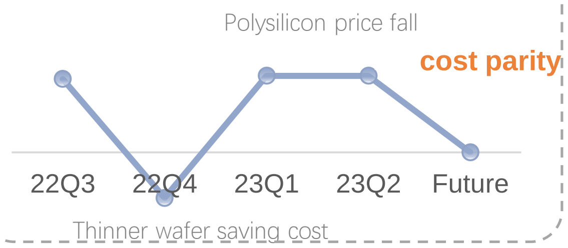
N-type cell capacity (GW)



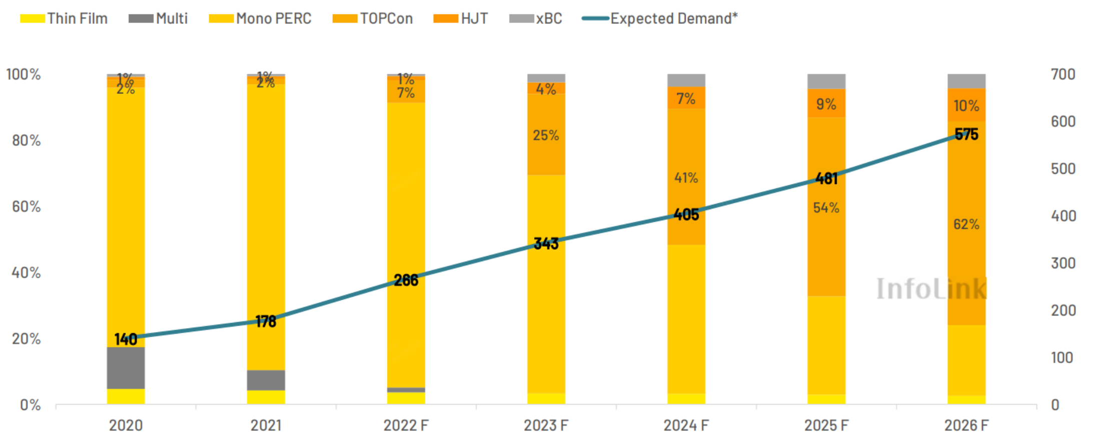
N-type module price premium



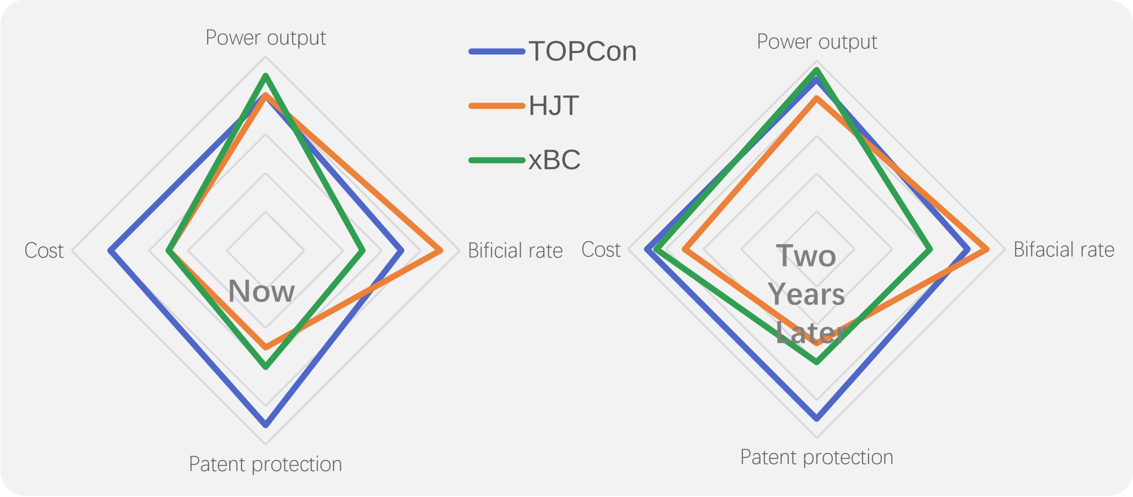
N/P Integrated cost difference



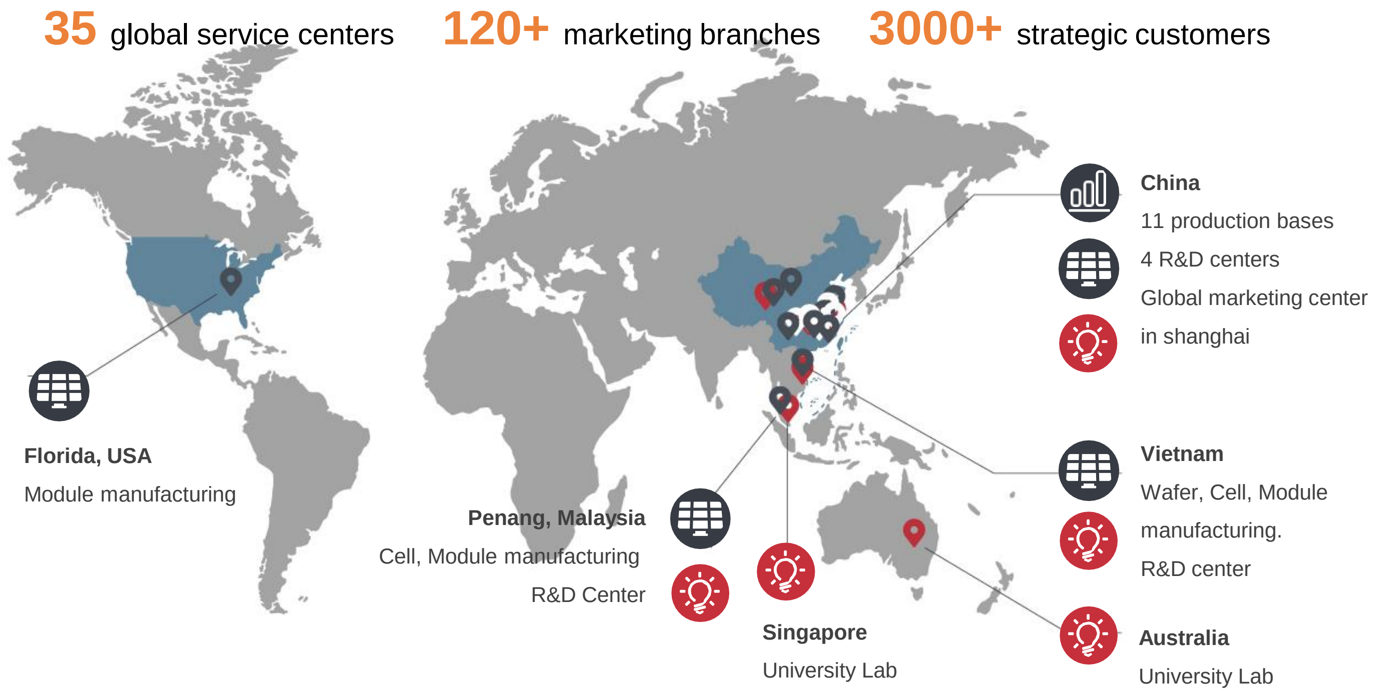
Dominance of N-TOPCon will last at least 3-5 years



Advantage of N-TOPCon over other cell technologies



Expanding global advantages



U.S. Department of Commerce

Bureaus and offices - Contact us

Search

ABOUT | ISSUES | NEWS | DATA AND REPORTS | WORK WITH US

All news
Press releases
Blog
Speeches
Fact sheets
Op-eds
Photos and videos
Livestreams
Archives
Media contacts

Home » News » Press Releases

Department of Commerce Issues Final Determination of Circumvention Inquiries of Solar Cells and Modules from China

Trade enforcement

Today, the U.S. Department of Commerce announced the final determinations in the circumvention inquiries of solar cells and modules from the People' s Republic of China (China). Commerce found that certain Chinese producers are shipping their solar products through Cambodia, Malaysia, Thailand, and/or Vietnam for minor processing in an attempt to avoid paying antidumping and countervailing duties (AD/CVD). The final

FOR IMMEDIATE RELEASE
Friday, August 18, 2023
Office of Public Affairs

Third Country	Company	Finding
Cambodia	BYD Hong Kong	Circumventing
	New East Solar	Circumventing
Malaysia	Hanwha	Not Circumventing
	Jinko	**Not Circumventing**
Thailand	Canadian Solar	Circumventing
	Trina	Circumventing
Vietnam	Boviet	Not Circumventing
	Vina Solar	Circumventing

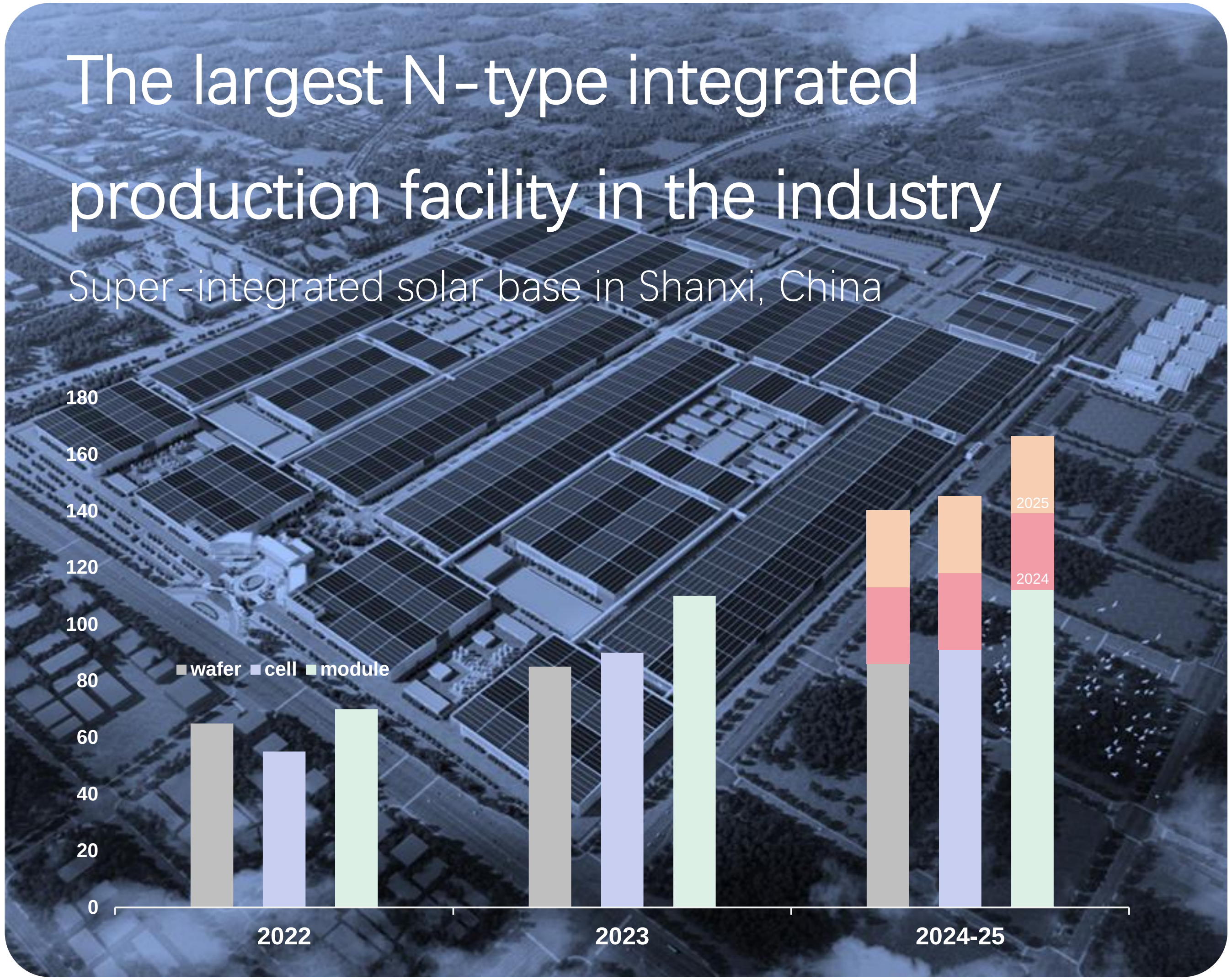
The Largest 12GW+ overseas integrated capacity; over 75% are N-type

- **Overseas traceable polysilicon secured**
- **Wafer:** 12GW (Vietnam)
- **Cell:** 8GW (Vietnam) + 6GW (Malaysia)
- **Module:** 8GW (Vietnam) + 6GW (Malaysia) + ~2GW (US)

ESG management improved to enhance sustainability competence

- Improved traceability system
- Independent 3rd party audits
- Joined RE100, EP100, UNGC, IRENA and set up SBTi net zero emission target

Fostering Future Competitiveness



56GW wafer-cell-module integrated

- ✓ Phase 1 + Phase 2 (14GW each) expected to start production in **1H 2024**

Unprecedented production innovation

- ✓ **One-site vertical operation:** to significantly reduce operation costs and improve efficiency
- ✓ **Cutting-edge technology:** advanced and upgradable N-type technology
- ✓ **Low carbon footprint:** mostly powered by green energy
- ✓ **Cost Effective:** lower integrated CAPEX per GW
- ✓ **Smart and traceable** manufacturing capabilities

Business Plan

- Module shipments target raised to **70~75GW** , from 60-70GW in 23Q1
- N-type products accounts for **60%** in 2023, with competitive price premium
- Integrated overseas capacity **12GW+** with ~2GW module capacity in US

- Mass-production N-type cell efficiency **25.8%**, expected to reach **27-27.5%** in 2025
- More than **75%** of total capacity expected to be N-type, integrated cost of N-type close to P-type
- To maintain **6-month** N-type technology leadership over peers

- Wafer, cell and module capacity expected to be **85**GW, **90**GW, **110**GW by the end of 2023
- Lower leverage ratio and improve net cash
- Build N-type supply chain **ecosystem;** develop **PV+energy storage** business

Consolidating our strengths to overcome challenges and embrace opportunities

Challenges

- **Supply:** excessive capacity plans by new comers
- **Demand:** trade tariffs, grid connection/transmission issues
- **Profit:** margin suppressed by low module prices
- **Technology:** short lifecycle of new technologies
- **Capacity:** massive depreciation of PERC capacity
- **Integration:** from cooperation to competition
- **Management:** scale, compliance, power transition

Opportunities

- ✓ Tier-1 players have better cost and efficiency
- ✓ Overseas/traceable supply chain, energy storage
- ✓ N-type module price premium sustainable
- ✓ Constant introduction of technical upgrade
- ✓ N-type capacity expansion learning curve
- ✓ Brand and reputation become new entry barriers
- ✓ Professional and passionate management team

Competition promotes a healthier industry

Innovation, globalization key to success

Long-term Growth Strategies

Long-term R&D and product leadership

- Cutting-edge R&D.
- A highly collaborative and innovative system from wafer-cell-module to system solutions.
- Ability to quickly commercialize R&D results in mass production.

Effective and efficient Management Capability

- Optimizing in-house manufacturing to reduce integrated cost.
- Refined management processes to further optimize operational efficiency.
- Efficient execution ability.

Global industrial chain footprint and marketing network

- Global manufacturing footprint and vertically-integrated supply chain to optimize resources allocation.
- Extensive global marketing network with localized after-sales service.
- Long-term accumulated brand advantage with product reliability.

Q&A

JinKO Solar

Building **Your Trust** in Solar