## Jetion Solar (China) Co., Ltd.

### **China - Headquarters**

Jetion Solar (China) Co., Ltd.
No. 1011, Zhencheng Road, Shengang, Jiangyin,
Jiangsu Province 214443, P. R. China
Tel: +86 510 8668 7300 400-8868-659
Fax: +86 510 8668 7315
Email: marketing@jetion.com.cn

#### **Global Branches**

#### Liechtenstein

Jetion Solar (Europe) Ltd. Industriering 10, FL - 9491 Ruggell, Liechtenstein Tel: +423 265 3830 Fax: +423 265 3839 Email: marketing@jetion.com.cn

#### Italy

Jetion Solar (Europe) Ltd.
Viale dell'arte 19/A 00144 Roma Italy
Tel: +39 064814040
Fax: +39 064870559
Email: Jetionsolareuropeltd@pec.it

#### Thailand

Jetion Solar (Thailand) Co., Ltd.
Room 1602, 202 Le Concorde Tower, Ratchadaphisek Road,
Huay Kwang District, Bangkok 10310 Thailand
Tel: +66 2024 8702-4
Fax: +66 2024 8705
Email: marketing@jetion.com.cn

### **Manufacturing Facilities**

# CNBM (Jiangyin) Photoelectric Material Technology Co., Ltd.

New material Industry Park, Huangtu, Jiangyin, Jiangsu Province 214443, P. R. China

## Jiangyin Fab - China

No. 1011, Zhencheng Road, Shengang, Jiangyin, Jiangsu Province 214443, P. R. China

### **Haian Fab - China**

Haian Industry Park, Haian, Nantong, Jiangsu Province 214443, P. R. China Tel: +86 513 8878 5988

#### **Tongcheng Fab - China**

Beisan Road, Tongcheng Econonic Development Zone, Tongcheng, Anhui Province, P. R. China

#### Chonburi Fab - Thailand

Jetion Solar (Thailand) Co., Ltd. 83/44 Moo 10Tambol Nongkham, Amphur Sriracha, Chonburi 20230 Thailand Jetion Solar company brochure 2023\_11\_Rev\_EN









# **VISION**

Reshape the world with unlimited solar energy.

# **MISSION**

Empower the society with sustainable green energy, create a better world.

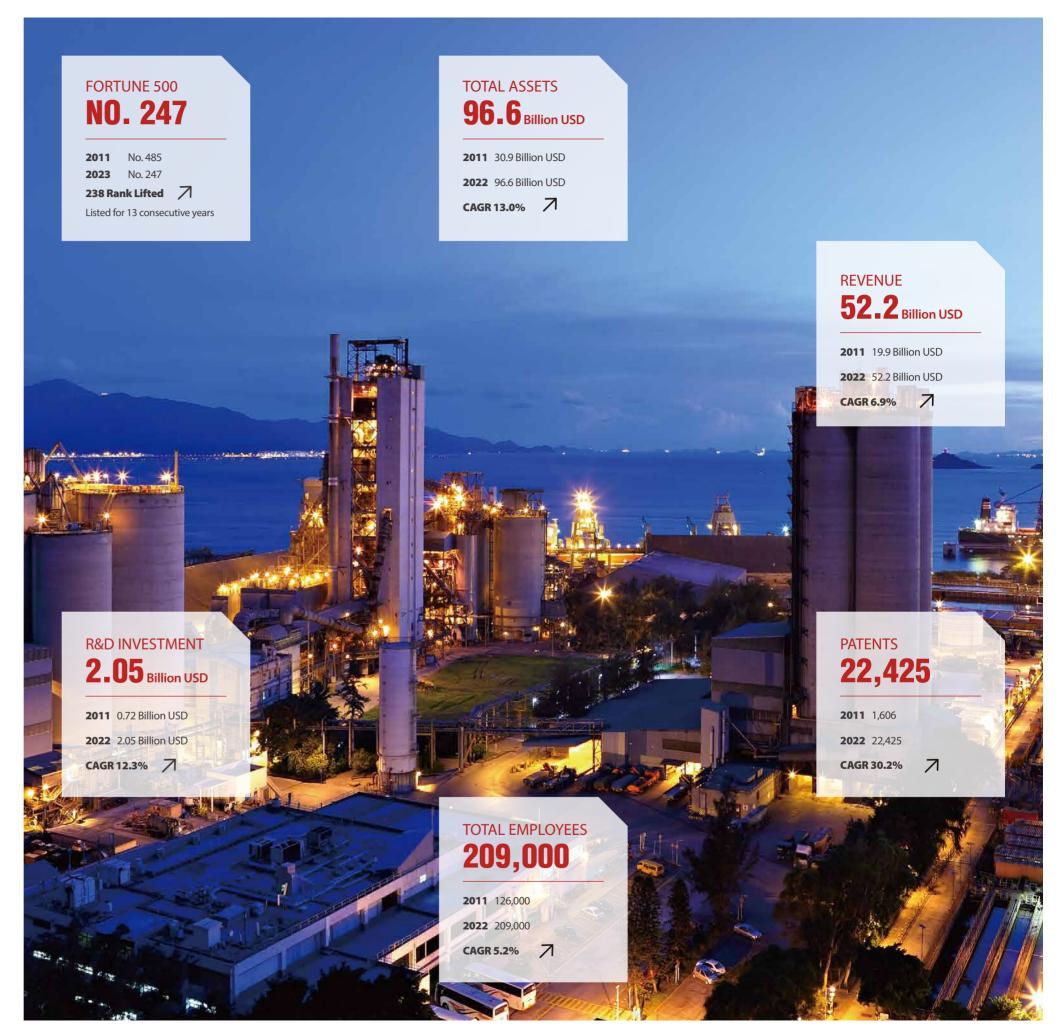


# CNBM NOT JUST A BUSINESS GROUP, BUT ALSO NATIONAL CORNERSTONE

China National Building Materials Group Corporation (CNBM) was established through the merger of the China National Building Materials Group Corporation and China National Materials Group Corporation, with approval from the State Council, and then became a Central Enterprise under direct supervision of State-owned Assets Supervision and Administration Commission of the State Council. CNBM is the largest comprehensive building materials industry group in the world, and a leading new materials developer and integrated service provider throughout the world. It has been listed in the Fortune Global 500 for thirteen consecutive years.

Upholding the philosophy of "creating a better world with materials", CNBM is dedicated to fostering the concepts of "forging a nation with the spirit of greatness and the finest materials", "smart use of resources, services for construction", and adhering to the strategies of "development driven by innovation, empowered by reform, facilitated by internationalization and guided by Party building". CNBM is committed to building a world-class industrial investment group specializing in the material industry with global competitiveness.





**Turbine Blades** 

production capacity

Fiberglass production capacity

production capacity

Ready-mix Concrete production capacity

production capacity

• Ultra-thin

electronic glass

Advanced Ceramics

and Artificial Crystals

Cement Clinker

Plasterboard



# **CNBM THREE CORE BUSINESS**

#### BASIC BUILDING MATERIALS

Cement, "Cement +" Business

## NEW MATERIALS

Light Weight Building Materials, Fiberglass, Carbon Fiber, New Glass Materials, Wind Turbine Blades, Lithium Battery Separator, Advanced Ceramics, Artificial Crystals

## **ENGINEERING & TECHNICAL SERVICES**

Overseas investment, Engineering construction, Extensive R&D services, Testing & Certification, "Vehicle Calling" Intelligent Logistics Platform, Cross-border e-commerce

14

Listed companies (2 oversea listed)

Academician

Workstation

26 National scientific research & design institutes

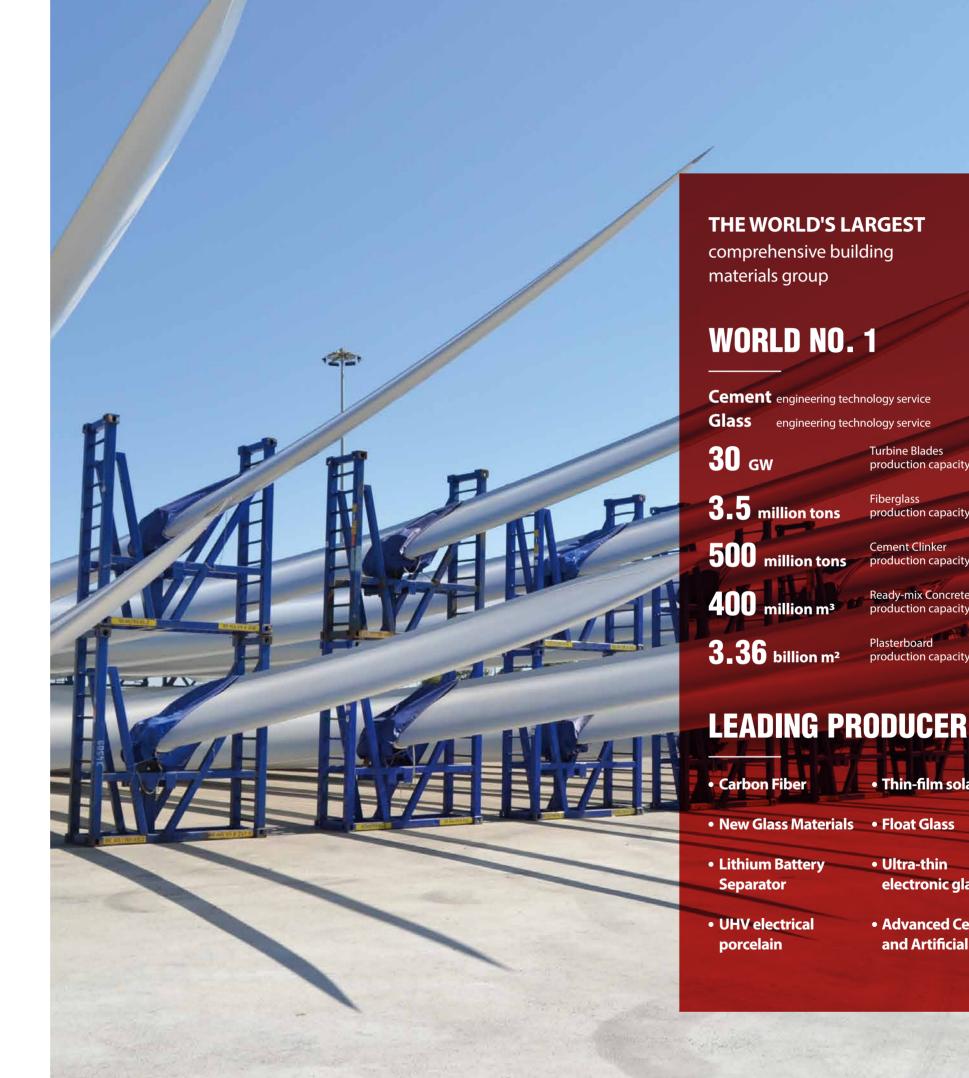
17

National standardization technical committees

National labs & technology centers

18

National enterprise technology centers







As a world-class solar products manufacturer, Jetion Solar specializes in research, development, production, and sales of solar PV products. Since its foundation in 2004, Jetion Solar has accomplished significant achievements which outpaced most of our main competitors in terms of production capacity and in the number of innovative designs. Jeiton Solar upholds its belief that innovation is the key driver behind advancement by pursuing new technologies and higher efficiencies.

In 2014, Jetion Solar joined CNBM (China National Building Materials Group Corporation) to better extend our value chain. So far more than 15 GW Jetion Solar's products have been widely applied in over 60 countries and regions, earning a coveted "Tier 1" rating on BloombergNEF Module Maker Tiering System. And as backed by CNBM, Jetion Solar also provide global EPC service and project financing. Currently, Jetion Solar has an annual production capacity of 4.4 GW of cells, 2.5 GW of modules with 5 manufacturing plants in both domestic and Thailand. Furthermore, there are plans for an additional 2.6 GW of HJT cells. Jetion Solar serves worldwide customers with high-quality products and professional services.

#### CNBM's Solar Value Chain

From raw materials to project development, CNBM provides the whole PV value chain integration.

















# **AMAZING DECADES**

## 2004

Jetion Solar was established in Jinagsu, China

## 2005

Major manufacturing facility was completed

Launched the first 25 MW PV cell production line

# 2008

Get VDE certificate

Awarded Deloitte "Top 50 High-tech and High Growth Enterprise of China 2008"

PV cell production capacity ramp up to 100 MW/year

PV module production capacity ramp up to 60 MW/year

## 2009

Awarded Deloitte "Top 50 High-tech and High Growth Enterprise of China 2009"

Get UL and CQC certificate

PV module production capacity ramp up to 75 MW/year

## 2011

Both PV cell and module production capacity ramp up to 500 MW/year

Capable of invest & develop 100 MW PV power plants per year

## 2012

PV cell and module production capacity ramp up to 700 MW/year and 900 MW/year respectively Reached 12 subsidiaries worldwide, and more than 3000 employees globally

# 2015

No. 1 market share in Thailand with more than 220 MW shipment

## 2017

Jetion Solar (Tongcheng) was founded, focus on PV module production

## 2020

PV cell and module production capacity ramp up to 2000 MW/year and 2500 MW/year respectively Recognized as Tier 1 on BloombergNEF Module Maker Tiering System for the first time

## 2021

Launched 550W+ high
efficiency monocrystalline
module - Jeniüs III series
Recognized as Tier 1 on
BloombergNEF Module Maker
Tiering System for seven
consecutive quarters

# 2006

Launched the first 30 MW PV module production line

## 2007

Jetion Solar listed on AIM of London Stock Exchange

Jetion Solar (Europe) was established in Liechtenstein

PV cell production capacity ramp up to 50 MW/year Get TÜV certificate

## 2010

Awarded Deloitte "Top 50 High-tech and High Growth Enterprise of China 2010"

Jetion Solar (Jiangsu) was founded, focus on PV module production

Jetion Solar Power (North America), the first overseas production facility, was established in Charlotte, USA

Jetion Solar's Jiangyin Low Carbon Industrial Zone manufacturing facility was founded, focus on PV cell production

Both PV cell and module production capacity ramp up to 200 MW/year

## 2014 -

Jetion Solar was restructured by CNBM (China National Building Material Group Co., Ltd.)

Launched Thailand factory with 100MW PV cell and 200 MW PV module production capacity

No. 1 market share in Thailand with more than 130 MW shipment

Started constructing a solar power plant with capacity of 70MW in Xinjiang, China.

## 2019

PV cell and module production capacity ramp up to 1200 MW/year and 1500 MW/year respectively A remarkable milestone -Jetion Solar's global module shipments exceed 10 GW

## 2022 -

Launched 700W+ HJT solar module, entering a new era of unltra-high efficiency

## 2023

Phase I of HJT project fully operational, increasing solar cell capacity to 4.4 GW









Stringent quality control is the cornerstone of Jetion Solar's manufacturing. Our customers have come to expect uncompromising quality standards in our products. To meet this expectation of high quality, we continue to invest in state of the art equipment and professional training of our employees. We are proud of our product quality and their reliable performance even in the most extreme conditions.

Jetion Solar has received certifications:

ISO 9001: Quality Management System

ISO 14001: Environment Management System ISO 45001: Occupational Health and Safety IEC 62941: Quality Management System

Jetion Solar (Tongcheng) has received certifications:

ISO 50001: Energy Management System

## **Certificates**









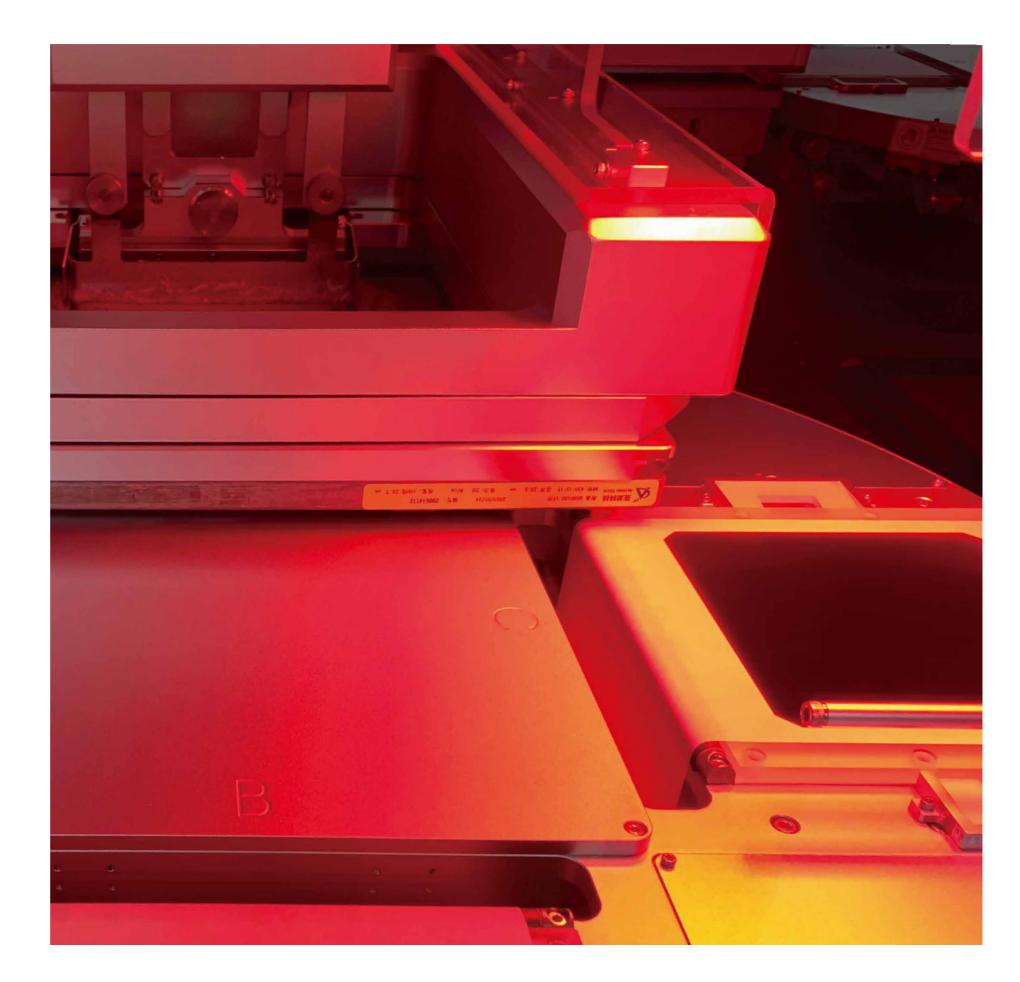


















## PERC technology

The PERC technology features were the reduction of rear surface recombination by a combination of dielectric surface passivation and reduced metal/semiconductor contact area while simultaneously increasing rear surface reflection by use of a dielectrically displaced rear metal reflector.



#### Split module design

Better performance in shading conditions with split module design



## Ultra high strength frame

Specially designed for "Jeniüs III" bifacial dual-glass series, passed 7200 Pa (front) mechanical load test, reducing shading with no C side design for short frame (Note: \*120 Cells series)



## Half-cut cell technology

Through reducing length of cell spacing, two half-cut cells can provide higher electric current, thus enhance 3% of power output. The output of two 10 bus-bar half-cut cells is even higher than one 12 bus-bar full cell.

# Jeniüs [[] high-efficiency monocrystalline series

JT 540-555 SGh/SSh(B)

# Jeniüs ∏ high-efficiency monocrystalline series

JT 650-670 SFk/SLk(B)





#### Bifacial cell technology

Generate electricity from backside of solar cell with environmental light reflections, brings additional 5%-25% more power generation.



### MBB cell technology

Increased cell bus-bar means more paths for electric charges, so there would be less resistance losses and more emitted electrons can be captured, thus it can increase power output by 2%.



#### 1500V DC

High system voltage of J-box and glasses, reduce PV system cost.



## Special frame design with anti-fouling patent

155-degree angle, excellent anti-fouling performance improve long-term power generation performance.

### JT 540-555 SSh(B)

 Maximum Power Pmax (W)
 540
 545
 550
 555

 Module Efficiency (%)
 20.9%
 21.1%
 21.3%
 21.5

 Dimensions / Weight
 2278×1134×30 mm / 32kg

 Number of Cells
 144 [2 x (12 x 6)]

For more versions, please visit, www.ietionsolar.c.

### JT 655-670 SFk

 Maximum Power Pmax (W)
 655
 660
 665
 670

 Module Efficiency (%)
 21.1%
 21.2%
 21.4%
 21.6%

 Dimensions / Weight
 2384×1303×35 mm / 32.7kg

 Number of Cells
 132 [2 x (11 x 6)]

The specication described in this document may deviate slightly, Jetion Solar (China) Co., Ltd. reserves the right to make any adjustment to the information described herein at any time without notice.



# TOPCon

## Advanced TOPCon technology

MBB N-type TOPCon solar cell, higher power output, Better anti-LID & LETID performance.



## MBB cell technology

Increased cell bus-bar means more paths for electric charges, so there would be less resistance losses and more emitted electrons can be captured thus it can increase higher power output.



## Split module design

Better performance in shading conditions with split module design.



## Half-cut cell technology

Current density reduced by 1/2, internal power losses reduced to 1/4 of conventional modules, rated output power increased by 5-10W.

# TOPCon ultra-high efficiency monocrystalline series

JT 565-580 SSt(B)

# HJT ultra-high efficiency monocrystalline series

JT 695-715 SLk(B)





#### Leading HJT Technology

A fusion of N-type wafer-based solar cell technology and thin-film PV, high-efficiency cell structure and special anti-reflective glass increase higher power output.



#### **Bifacial cell technology**

Bifaciality 80%, brings additional 5%-30% mor power generation, lower LCOE.



## **Industry leading warranty**

Anti-LID & PID, high reliability and longer lifetime 30 years linear performance warranty<12%.



## Special frame design with anti-fouling patent

155-degree angle, excellent anti-fouling performance improve long-term power generation performance.

#### JT 565-580 SSt(B)

 Maximum Power Pmax (W)
 565
 570
 575
 580

 Module Efficiency (%)
 21.9%
 22.1%
 22.3%
 22.5%

 Dimensions / Weight
 2278×1134×30 mm / 32kg

 Number of Cells
 144 [2 x (12 x 6)]

For more versions, please visit, www.jetionsolar.com

#### JT 695-715 SLk(B)

 Maximum Power Pmax (W)
 695
 700
 705
 710
 715

 Module Efficiency (%)
 22.4%
 22.5%
 22.7%
 22.9%
 23.0%

 Dimensions / Weight
 2384×1303×35 mm / 38.4kg

 Number of Cells
 132 [2 x (11 x 6)]

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# PROJECT TRACK RECORDS OUR RELIABILITY IS PROVEN BY OUR RESULTS

Our accomplishments have taken us from the Pacific Rim to the Europe and Americas. That growth stems from our persistent technology innovation in the past 19 years. And in fact that we deliver integrated, efficient solutions across the entire value chain, including PV products, global EPC services and project financing.







Alcoutim, Portugal

Riccardo Totta PV plant is the largest in Portugal, and among the largest unsubsidized projects built so far in Europe. Jetion Solar supplied more than 660,000 pieces of JT PAg polycrystalline PV modules. It will generate enough energy to power 200,000 homes after connected to the grid in October, 2021.



















Cádiz, Spain

Puerto Real project with a total planned capacity of 223 MW is one of the largest unsubsidized utility-scale solar power plants currently constructed in Spain. Puerto Real 1&2 comprise more than 500,000 pieces of PERC modules supplied by Jetion Solar, and it has been officially connected to the grid in March, 2021 and October, 2022 respectively.







Poland

Alpha project is a special portfolio PV project, which consists of 86 individual 1MW PV plants spread across Poland. The project contributes actively to helping Poland towards carbon neutral energy, and achieved the commercial operation date in June,



Solar-storage Project



Xigaze, Tibet

The project is a behemoth, clocking in at 40 MW of solar and 193 MWh of energy storage, and EPC was provided by CNBM New Energy Engineering who is affiliated with Jetion Solar. Until now, it is one of the world's highest altitude and largest installed capacity solar-storage projects. This project has been successfully connected to the grid in September, 2020.







Minbu PV Plant



Minbu, Myanmar

Minbu PV Plant is the first utility-scale and also the largest PV project in Myanmar. It covers about 200 acres and will supply power to over 60,000 households in Magway with any excess power fed into Myanmar's national grid. The project has been successfully connected to the grid in June, 2019.



# **ACHIEVEMENT SPEAKS FOR ITSELF**

We continuously expand our business and promote our latest technology and products, to strengthen our leading position in the PV industry.

# **FORTUNE 500**

Ranked #247 in 2023

CNBM - Jetion Solar's parent company has been listed in FORTUNE Global 500 for 13 consecutive years, with ranking from #485 in 2011 to #247 in 2023.

# **25.84** %

**Cell efficiency** 

Jetion Solar R&D team applies self-developed core patented cell technologies, such like phosphorus gettering, high cleanliness cleaning, i-a-Si passivation,  $\mu$ c-Si thin film, etc., and expected to realize mass production of cell efficiency with more than 25.84%.

# TIER 1

Ranked by Bloomberg
New Energy Finance

Jetion Solar is recognized as Tier 1 PV module manufacturer by BloombergNEF PV Module Maker Tiering System. With solid bankability, Jetion Solar is your reliable world-wide partner.

# 284

## **Patents**

Jetion Solar continues to lead the cutting-edge photovoltaic technology, with forward-looking vision and advanced technology to promote industry transformation and upgrading.

# **TOP 20**

## **Global PV capacity**

Jetion Solar has 4.4 GW of cell and 2.5 GW of module capacity with factories in China and Thailand. Furthermore, there are plans for an additional 2.6 GW of HJT cells.

# **15** GW+

## **Cumulative module shipment**

Since 2005, Jetion Solar has shipped more than 15GW of photovoltaic modules globally. (Note: \*Data as of the end of 2022)

# **TOP 50**

# Ranked by Deloitte. Technology Fast 50

Awarded Deloitte "Top 50 High-tech and High Growth Enterprise of China" for 3 consecutive years.

# **60** +

## **Countries and regions**

As of 2022, Jetion Solar's products have been widely applied in over 60 countries and regions in Europe, Asia Pacific, America and Africa.



# **GLOBAL PRESENCE**

As a world's leading renewable energy solution provider, we will continue to expand our global network, including production, R&D, logistics, sales and service networks to meet the customers' needs around the world.



- Headquarter
- Manufacturing Plants
- OBranches & Offices
- Warehouses

# SUSTAINABLE DEVELOPMENT

As a pioneer and leader of solar industry, Jetion Solar plays an important role in sustainable development. We are committed to contributing the society with green energy, and we expect Jetion Solar could bring lasting and positive impact for the human beings.

