

THANKS

ZNSHINE PV-Tech Co., Ltd.

Wednesday, May 13, 2020

www.znshinesolar.com



- 01 Who We Are
- 02 Why ZNSHINE
- 03 Our References
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Who We Are

Who Are We?



Tier1

PV modules
manufacturers



30+ years

Manufacturing
experience



5GW

Production
Capacity



Headquarters

Changzhou, China



DNV GL

Top Performer



NEEQ

The biggest PV company
listed on NEEQ



Reliable Bankability

Bankable Solar Products

Who We Are - Milestones



Who We Are – Three Business Units



EPC

**1,1 GW PROJECT
CONSTRUCTION**



MODULES

**5 GW FULL AUTOMATED
MANUFACTURING**



SOLAR SOLUTIONS

**ENERGY
STORAGE SYSTEM**

Who We Are - Mission & Vision



Mission

To make solar power become the most economical clean energy in the world.



Vision

Where there is SUNSHINE, there is ZNSHINE.



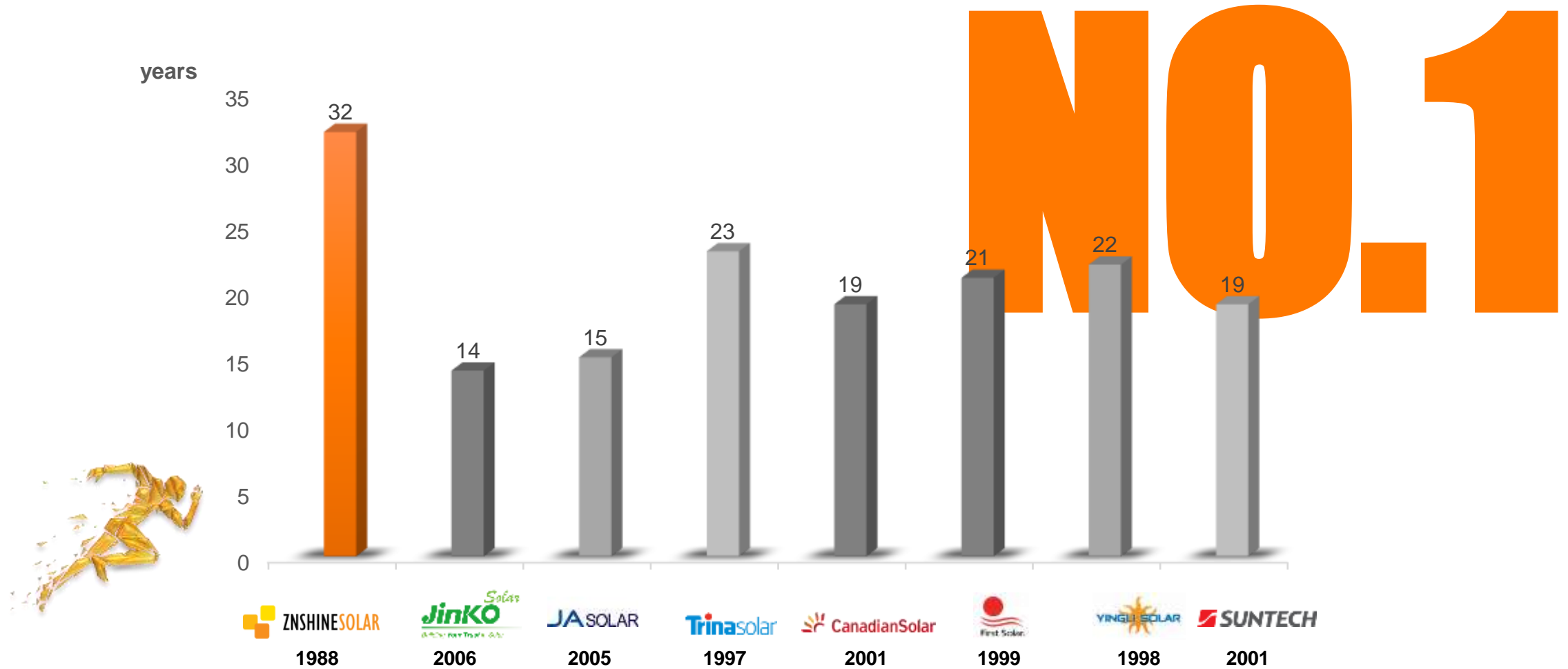
Value

Fairness and Trust



Why ZNSHINE

Why ZNSHINE- 32-Year Manufacturing Experience



Why ZNSHINE- Top Module Supplier to India

NO.1

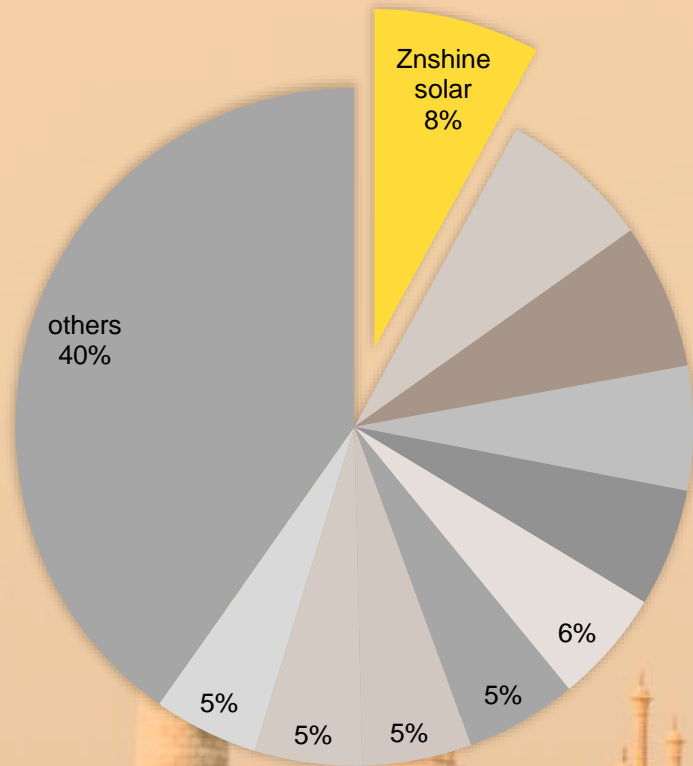
ZNSHINE SOLAR

India's NO.1

Module Supplier

Market share 2018

Source: Mercom India



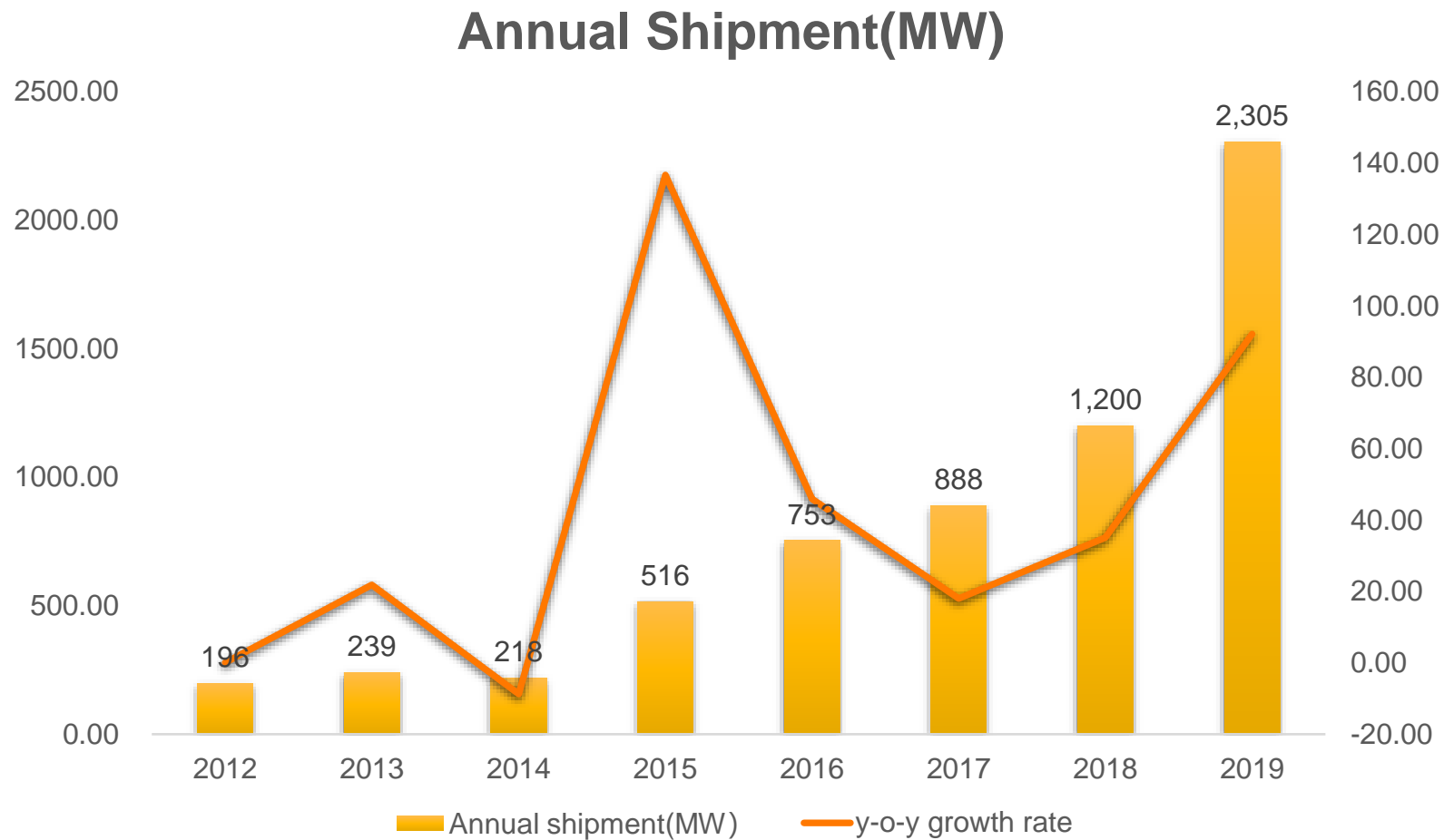
Why ZNSHINE- NO.1 EPC Qualification In Japan

In 2011, ZNSHINE entered Japan's market. ZNSHINE Solar has over 1.3GW of projects in pipeline in Japan and 1.3GW in China In 2016. It has earned the trust of local and national governments as a certified and acknowledged EPC in both countries.

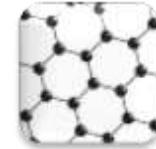
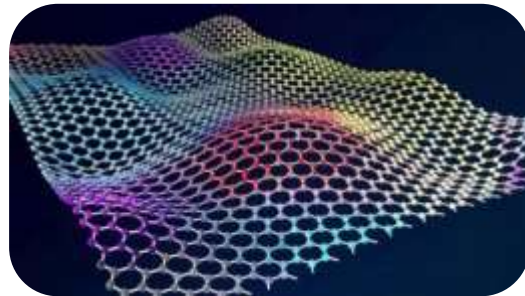
NO.1



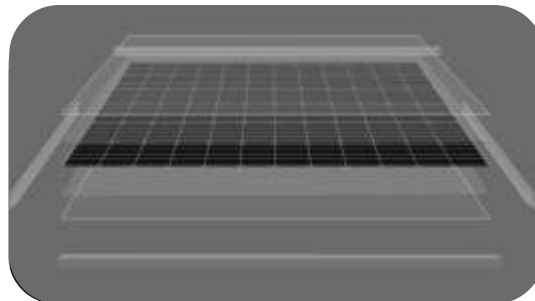
Why ZNSHINE- Year-Over-Year Growth



Graphene-Coating



Double-Glass



Bifacial



Mono



Poly



Half-cut

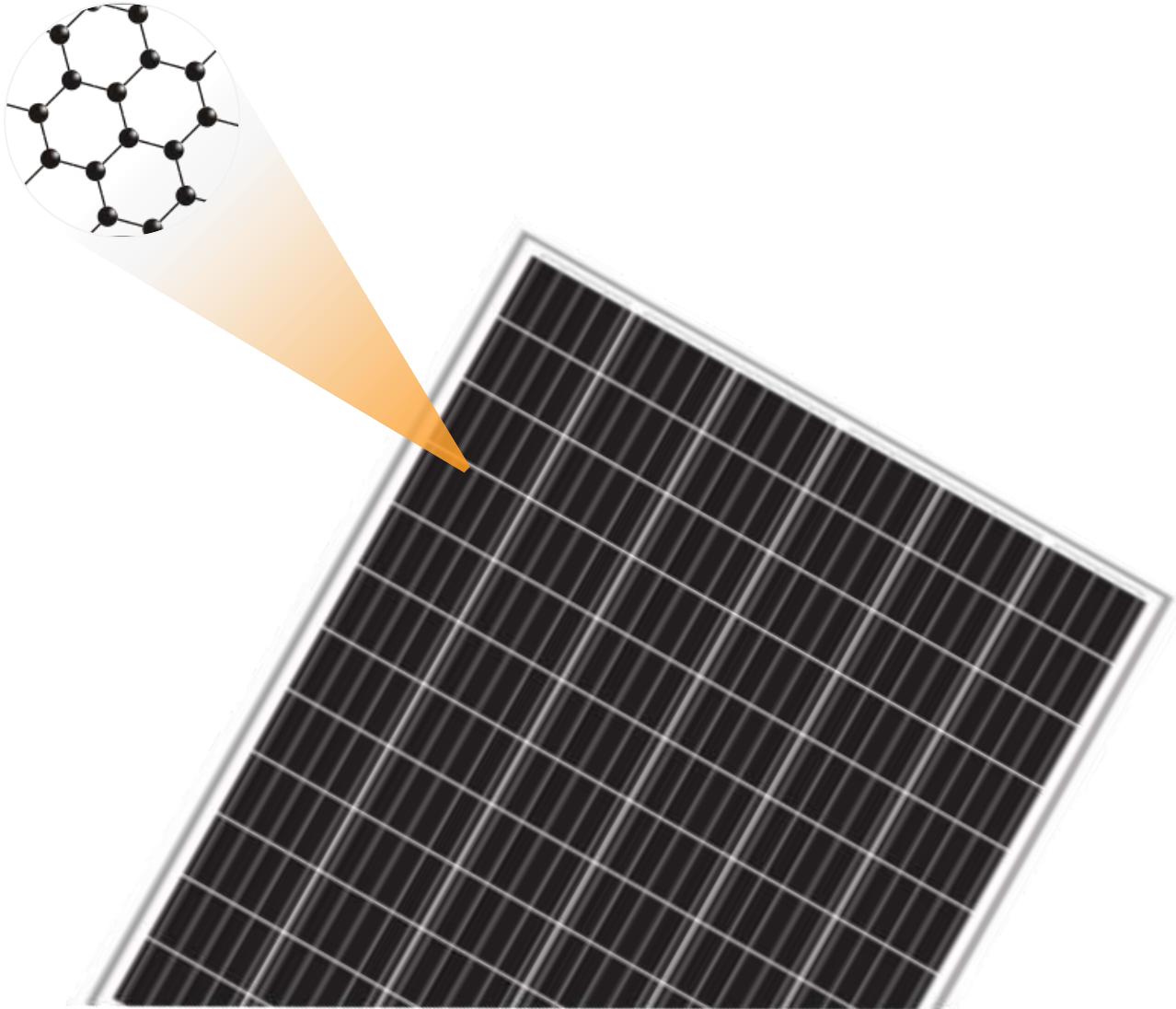


MBB



Large Cells

Why ZNSHINE– Graphene Coating



More Power Than Standard



Longer Product Life



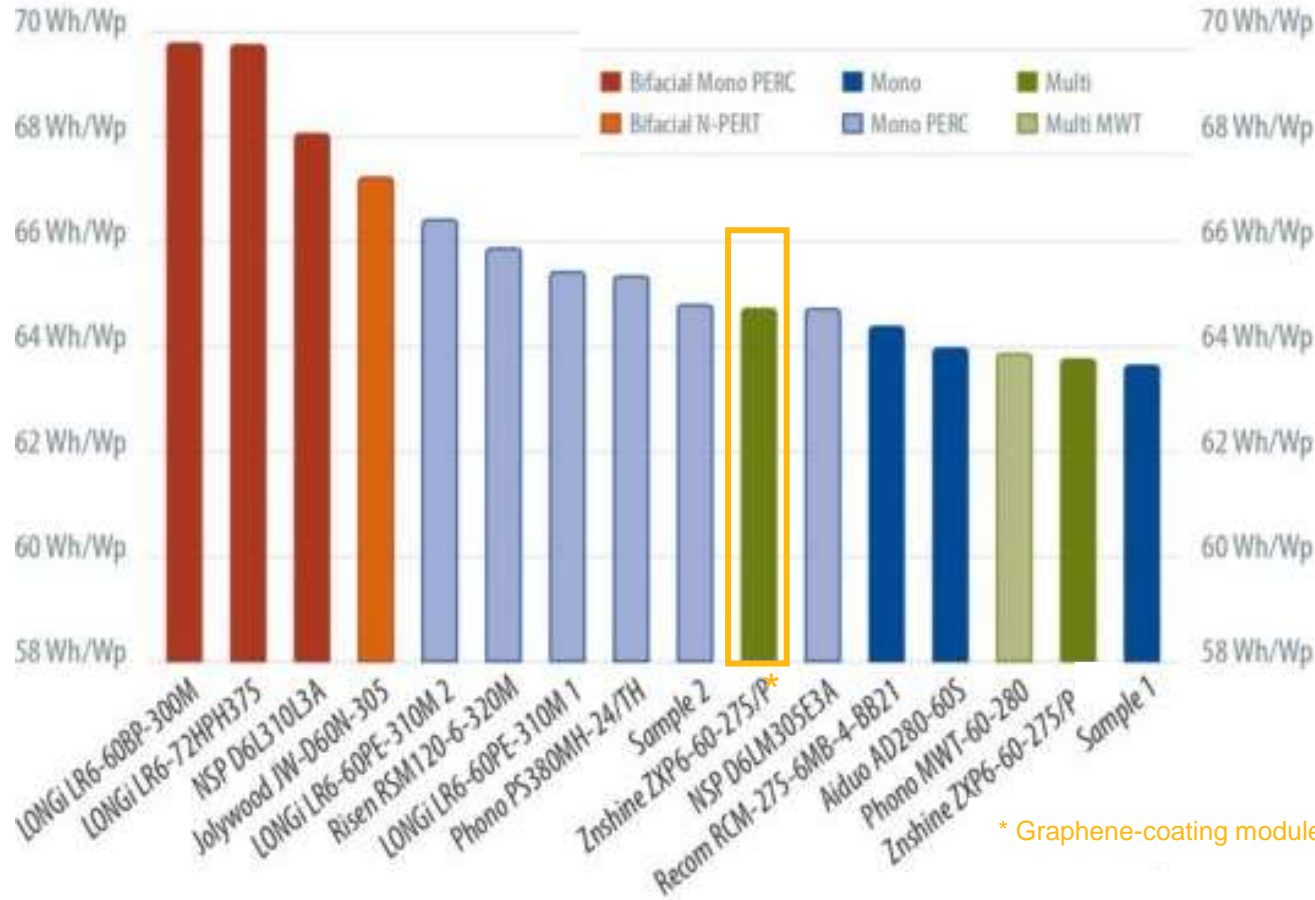
Self-cleaning



Better Low-light Performance

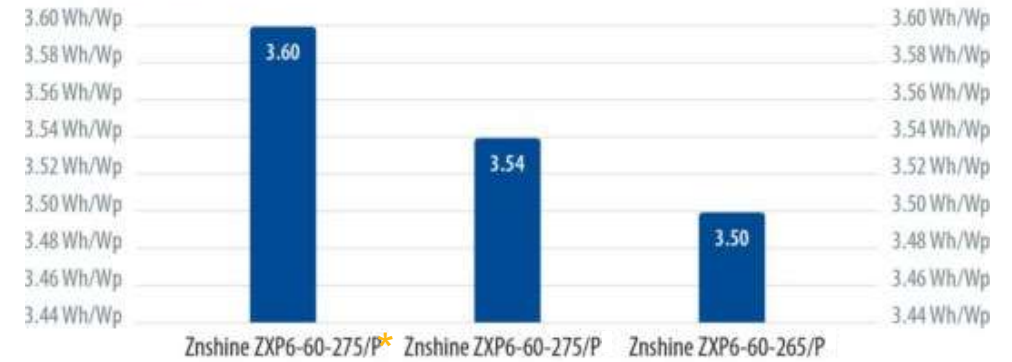
Why ZNSHINE- Outdoor Real Test Conditions

Total energy yield (September 2019)



* Graphene-coating module

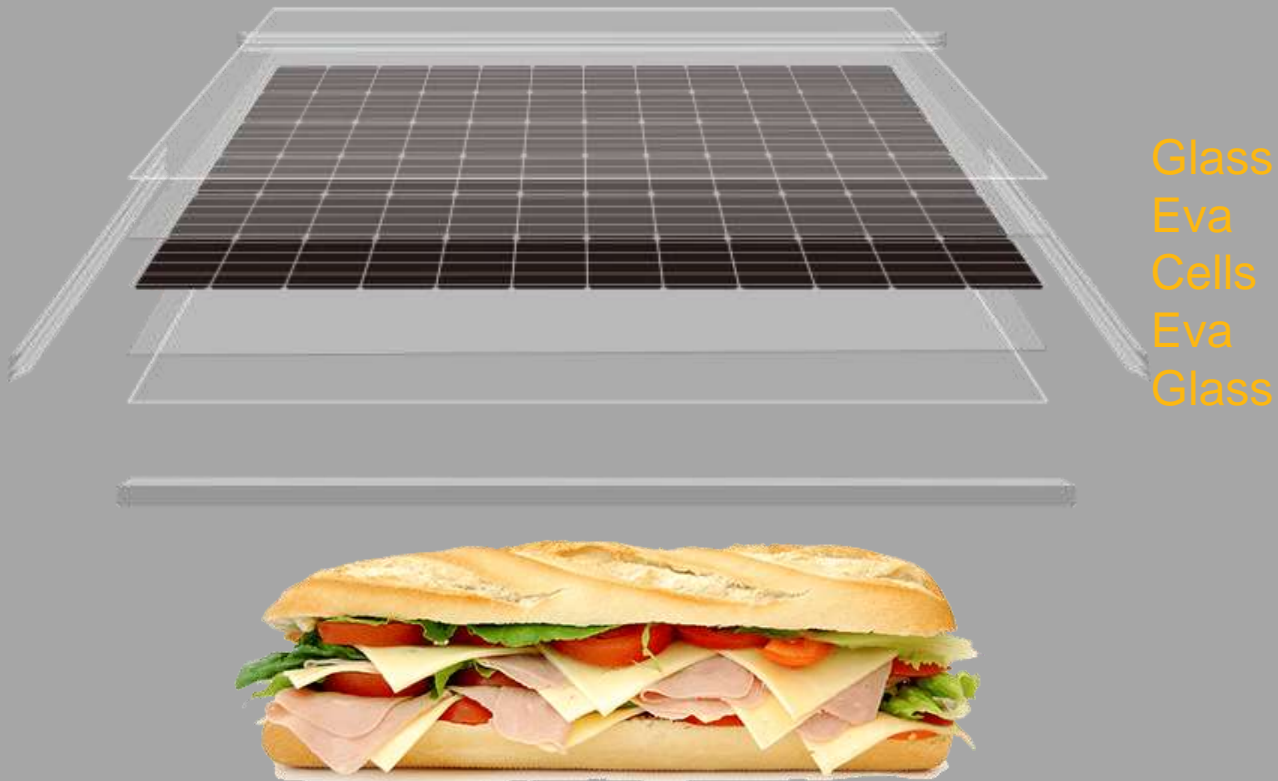
Znshine controlled test (September 2019)



PV Magazine Module Benchmark test, ZNSHINE Solar's Gra-Poly modules demonstrated impressive energy yield with 1.1% boost.



Why ZNSHINE- Double Glass Framed Modules



High Reliability



30 Years Performance Warranty



Low Micro-crack Risk



Frame Design, Easy Transportation and Installation

Why ZNSHINE- Global Leader in Double-glass

More than 230MW

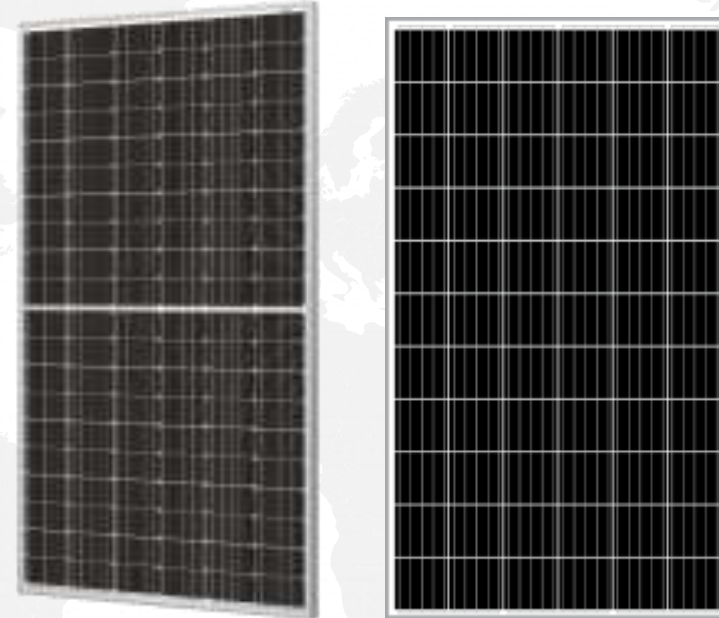
Double-glass solar modules shipped

Fully automated, 500MW fully autonomous production line

Shipped to MENA/South America



230
MW



Why ZNSHINE- Tier 1 Ranking

2017

2018

Table 1: Tier 1 PV module manufacturer list, 4Q 2017

Company	Capacity	Company	Capacity
Trina Solar*	8,000	Changzhou Almaden	1,500
Jinko Solar*	7,500	HT-SAAE*	1,500
JA Solar*	7,000	China Sunergy	1,450
Canadian Solar*	6,970	REC Group*	1,300
Hanwha Q Cells*	6,400	Akcome	1,000
GCL Systems*	5,000	Phono Solar	1,000
Longi	5,000	ET Solar*	1,000
Talesun*	5,000	Vikram*	1,000
Suntech/ Shunfeng*	3,300	SunPower*	900
Seraphim*	3,000	Boviet	700
First Solar*	2,200	Neo Solar Power*	670
Hareon	2,000	Tata Solar Power	500
Renesola	2,000	Waaree	500
LG*	1,650	AU Optronics	455
ZNShine	1,600	Total	80,095

Table 1: Module manufacturers meeting Bloomberg New Energy Finance's tier 1 criteria as of 3Q 2018

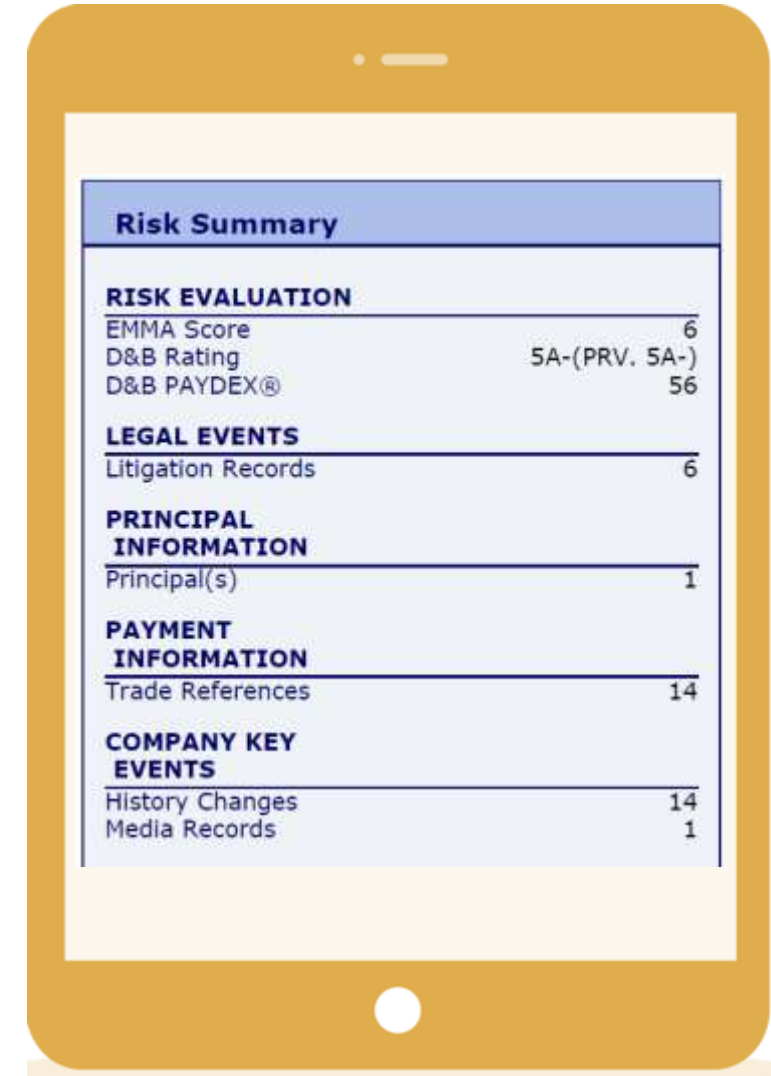
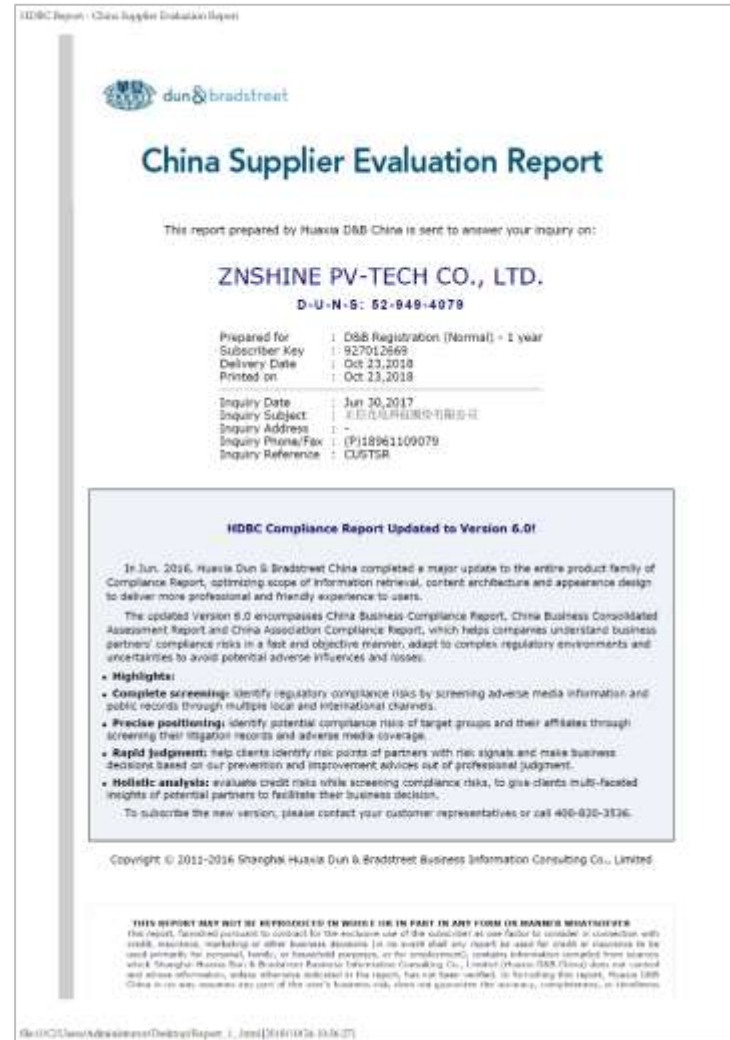
Firm/brand	Annual in-house module capacity (MW/year)	Firm/brand	Annual in-house module capacity (MW/year)
Jinko Solar*	9,000	HT-SAAE*	1,500
JA Solar*	8,500	WAAREE	1,500
Canadian Solar*	8,310	China Sunergy	1,450
Hanwha Q CELLS*	8,000	REC Group*	1,400
Trina Solar Ltd*	8,000	Kyocera Corp	1,350
Risen	8,000	Akcome	1,000
GCL Systems*	8,000	ET Solar	1,000
Talesun	8,000	Vikram*	1,000
Suntech/ Shunfeng*	3,300	Neo Solar Power	670
Znshine Solar*	3,200	Lightway Solar	660
Seraphim	3,000	S-Energy	530
Chint/Astronergy	2,500	Hansol Technics	480
First Solar*	2,200	AU Optronics	455

ZNSHINE SOLAR TOP10

ZNSHINE SOLAR TOP15

Why ZNSHINE-Financial Strength

D&B rating indicates the great Financial Strength and Credit Ranking of ZNSHINE business as a whole.



Why ZNSHINE-Top Bankable Panel

Audited by third parties



TOP
PERFORMER




IFC Approval
listed Solar Company



China RE
& Munich RE
Warranty



PV Module Bank
Grade Audit




Factory Audits and
Production Supervision

Project Financing – Bank overview

Bank	Head Quarters	Country of Projects	Size of the Projects Financed
Sparkasse Versicherung	Austria	Germany	3 MW ≤ x ≤ 25 MW
Cassa di Risparmio di Romagna	Italy	Italy	1 MW ≤ x ≤ 3 MW
Banca Popolare di Milano	Italy	Italy	1 MW ≤ x ≤ 3 MW
Centroleasing spa	Italy	Italy	1 MW ≤ x ≤ 3 MW
Pool Unipol Leasing	Italy	Italy	≤ 1 MW
ICBC	China	China	≥ 5 MW
Unicredit Bulbank	Bulgaria	Bulgaria	3 MW ≤ x ≤ 25 MW
Banca Italo Romana (Gruppo Veneto Banca)	Romania	Romania	≤ 1 MW
Piraeus Bank	Greece	Romania	3 MW ≤ x ≤ 25 MW
Shirwa Bank	Japan	Japan	1 MW ≤ x ≤ 3 MW
China Development Bank	China	China	≥ 20 MW
Macquarie	Australia	UK	≥ 10 MW
GLS	Germany	Germany	3 MW ≤ x ≤ 25 MW
Jiangsu Financial Leasing	China	China	1 MW ≤ x ≤ 3 MW
Howa Bank	Japan	Japan	1 MW ≤ x ≤ 3 MW
Okoyama bank	Japan	Japan	1 MW ≤ x ≤ 3 MW
Shinhan Financial Group / Shinhan BNP Paribas	Korea	Japan	≥ 30 MW

Financing History

Financing by major international credit institutions (including GLS, Shinhan - BNP Group, Macquarie, Unicredit Group, ICBC)






In America ZNSHINE SOLAR is currently into talks with EastWest Bank Debt provider, bankable for ZNSHINE SOLAR projects up to 20MW

Below are all case by case evaluation

- Wells Fargo: Debt and Tax Equity provider, evaluates case by case
- Bank of America: Tax Equity provider, evaluates case by case
- Credit Suisse: Tax Equity provider, evaluates case by case
- State Street Bank: Debt provider, evaluates case by case
- JP Morgan: Tax Equity provider, evaluates case by case
- CIT Bank: Debt provider, 10-20MW
- PNC Bank: Debt & Tax >500kw
- Union Bank: Tax equity between \$35M-\$40M
- Pipe Jaffray: Debt & Tax > 15MW

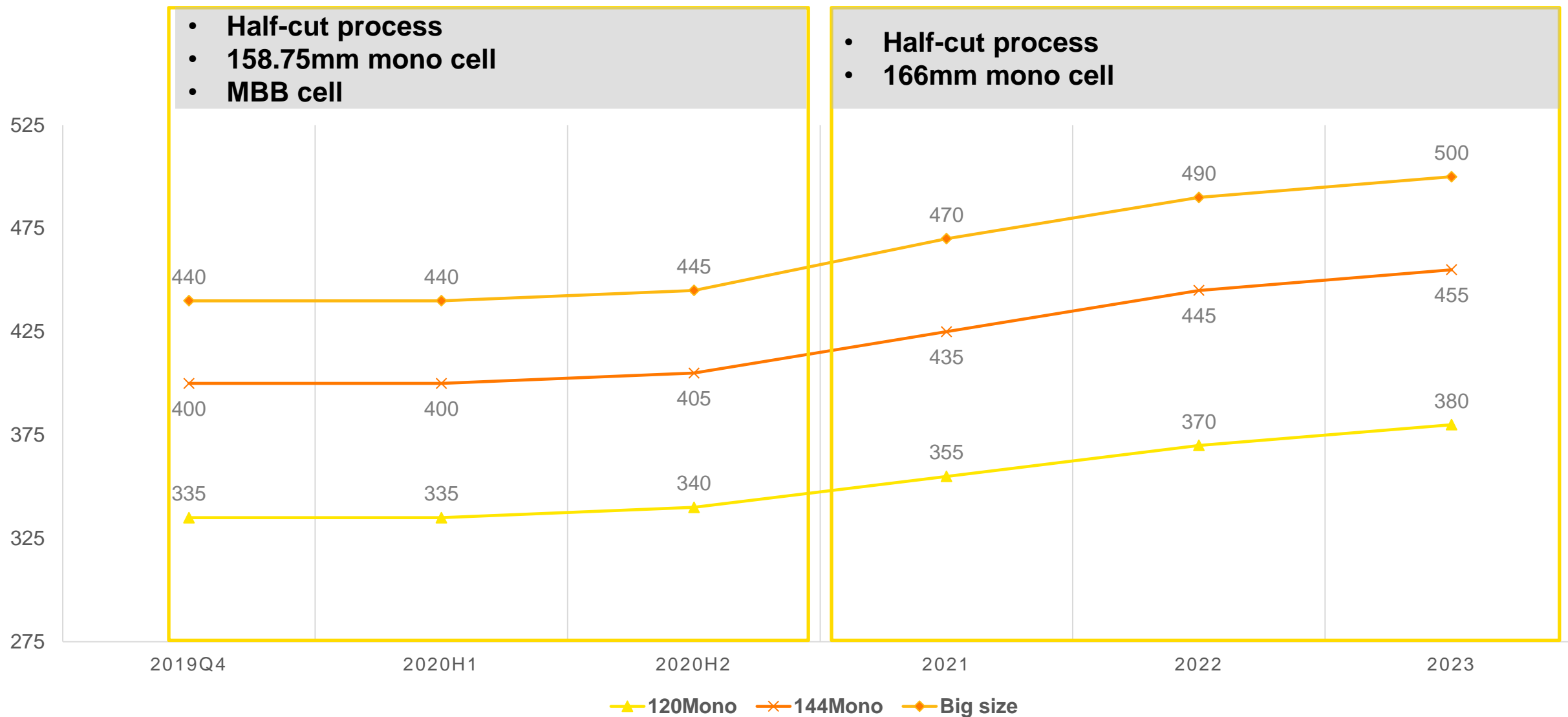
Why ZNSHINE- Excellence in R&D



-  **>100 Global Engineers**
-  **Exclusive Graphene-coating Patent Worldwide**
-  **>100 Technology Patents**
-  **1st self-cleaning modules in market**
-  **Certified Laboratory by CNAS**



2019-2023 Mainstream High-Power Module



Why ZNSHINE- State-Of-The-Art Manufacturing



Fully Automated Production Lines



MES



Coordinated Quality Control System



Mass Production Yield > 99.8%



30 Years of Experience
Empowers our Quality Management

Why ZNSHINE-World Class Certifications

Reliable And High Efficiency Modules Guarantee Your Profits



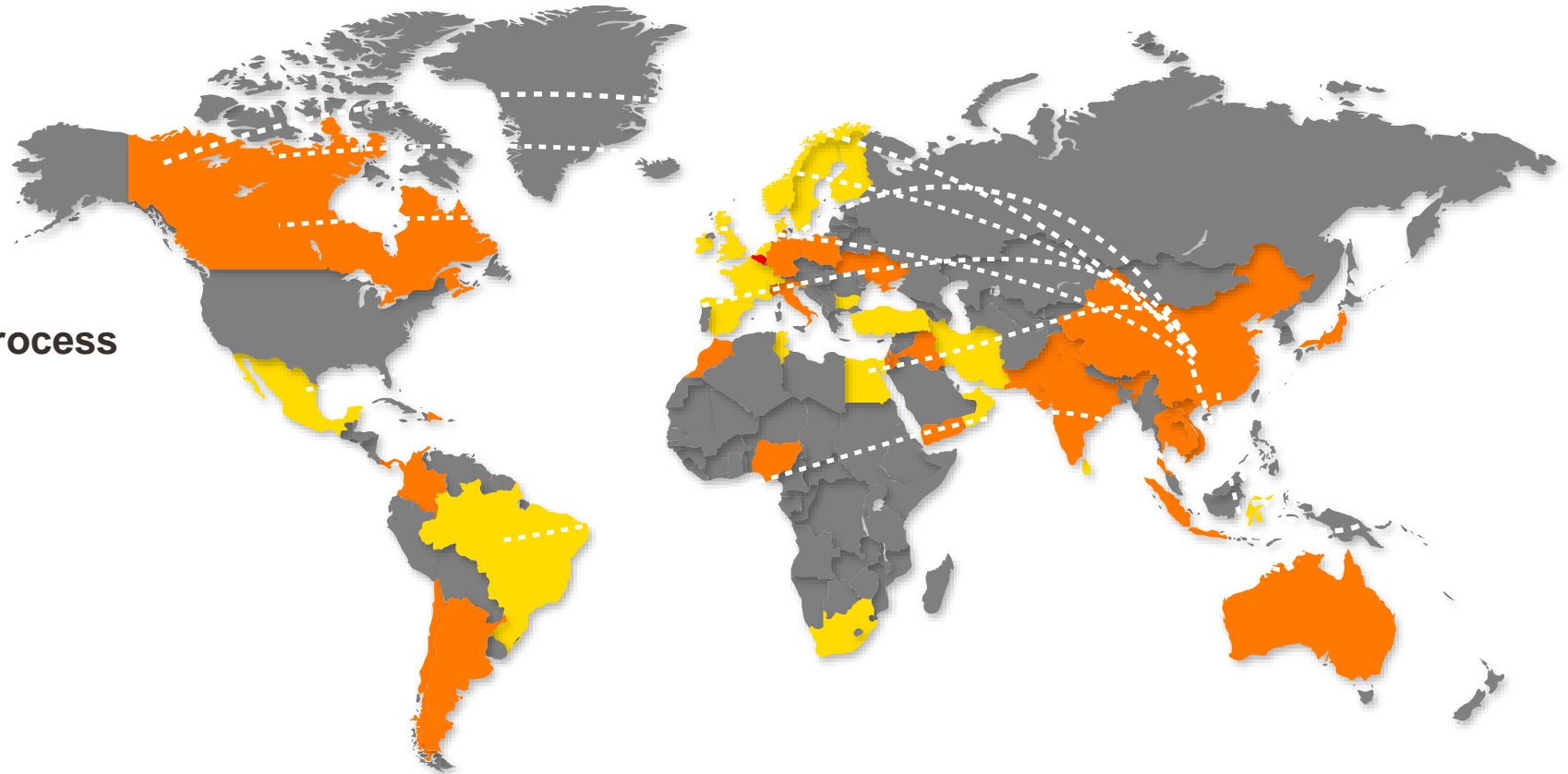
Why ZNSHINE- Fast-Responding Service

12 12-hour Quotation

12 12-hour Contract Process

24 After-sale Service

24 24-hour Response



30 Local Subsidiaries/offices



Our References

References - ZNSHINE India

2018 Top 20 China module Suppliers of India

Rank		Shipment(MW)									Total
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
1	Znshine Solar	48.1	35.7	87.5	33.3	72.8	96.8	89.3	75.8	78.0	617.3
2	JA Solar	180.3	103.2	23.9	0.1	1.0	23.9	101.2	3.3	0.0	436.9
3	Jinnerngy				0.0	128.2	125.7	134.9	46.6		435.4
4	Risen	146.8	59.9	1.9	63.2	12.3	10.6	115.5		0.2	410.4
5	GCL-Si	88.6		4.0	53.2	4.2	110.1	114.7		13.3	388.2
6	Lerri Solar	118.2	94.1	18.7	65.0	58.9	0.2	29.8	0.7	0.0	385.8
7	Trina	187.0	43.1	24.6	4.2	3.3	13.0	3.2	62.9	21.8	363.1
8	Suntech	65.2	63.8	100.4	10.7	8.5	6.7	9.7	12.8	56.7	334.5
9	Canadian Solar	93.4	15.2	7.7	1.7	8.9	6.9	0.0	11.8	69.7	215.3
10	Astronergy	60.9	71.8	52.7	23.8	3.1		0.8		0.1	213.3
11	Talesun	64.6	33.9	0.1	0.0	0.4	29.9	35.6			164.6
12	ReneSola	11.7	13.1	12.2	5.8	1.8	4.4	37.9	47.4	23.8	158.0
13	CSUN	0.2	0.4	4.4			22.7	122.3	1.4		151.5
14	HT-SAAE	21.0	49.8	40.1	10.8	0.0		10.0	0.0		131.7
15	Anhui Schutten	4.5		10.0	10.0	20.9	9.0	23.6	32.4	16.5	126.9
16	Yingli	46.5	23.0	49.2	1.3		0.1				120.1
17	Hanwha Q-cells	27.7	5.6	0.7	10.9	7.1	1.6	5.1	5.5	0.2	64.3
18	Jinko	9.9	6.7	21.5	4.2	5.7	1.6	0.3	3.7	0.5	54.2
19	Seraphim	3.7	12.3	12.5	15.8	5.1	0.7	0.0	1.5	1.0	52.5
20	Econess Energy		24.0	26.6			0.0	0.2			50.7
	Others	17.6	59.8	13.5	11.6	8.1	26.3	53.6	13.8	29.7	234.0
	Total	1196.0	715.5	512.2	325.5	350.3	490.3	887.8	319.6	311.5	5108.7



Project1
Installed capacity: 300 MW
COD: September 17th, 2018



Project 2
Installed capacity: 300 MW
COD: September 17th, 2018

Source: PV InfoLink



DEWA (Dubai Electricity and Water Authority)

ZNSHINE Panels will be installed in 15,000 Villas Rooftops in Dubai





One Stop Warehouse

- Australia's largest Solar Distributor



Achieve Energy Solutions

- Top solar distributor in Australia



References - ZNSHINE Japan



Hamada Project phase II
Installed capacity: 23MW
COD: April 26th, 2017



Hamada Project phase I
Installed capacity: 11MW
COD: October 20th, 2015



SIGNING Of 300MW Solar Project

Nov.8th ,2017, ZNSHINE as the only solar company signed the MOU of 300MW solar project with the president of Mato Grosso Brazil.



PFV Solared de la Punta, San Luis, Argentina

References- ZNSHINE Europe



St. Columb Solar Park, UK, Europe

- Commissioned March 2014
- Installed capacity: 7 MW
- Investor: Low Carbon (Macquarie)
- Module type: ZXP6-60 polycrystalline



Polos, England Solar Park

- Installation Capacity: 8MW



Sandelin Ham

- March 2014, grid-connected
- Capacity: 10.8 MW
- Investor: Low Carbon
- Module type: ZXP6-60 polycrystalline



Rudbaxton Solar Park, UK, Europe

- ZNSHINE provided 12kW Pv modules to the British Royal family at Sanderlin Manor, UK
- Rooftop 12KW



Brück, Germany, Europe

- Commissioned July 2014
- Installed capacity: 4,2 MW
- Investor: Naturstrom (GLS bank)
- Module type: ZXP6-60 polycrystalline

References- Fast Growth In New Market



DENMARK

108mw



UKRAINE

53MW



**NORSK
SOLAR**



Shanxi Province, Yulin ,PRC

Capacity:300MW May 2018

Jiangsu Province, Dongtai, PRC

Capacity: 5.9 MW Dec 2014



Inner Mongolia ,Wulatezhongqi ,PRC

Capacity:50MW May 2017

References - Partners & Clients

CHINA



CHINA



EUROPE



EUROPE



MENA



NA



NA



INDIA



INDIA



Branding and CSR



Home / Business / Companies

Powering up the world with solar

By Zheng Xin | China Daily | Updated: 2018-05-14 09:29



Znshine solar

1月11日 12:01 · 🌐

Come and join us at WFES 2020. We are looking forward to Visit us at Booth NO: 8251 | 13-16 January, 2020 | Abu Dh:

ZNShine to supply 100MW of solar panels to DEWA projects ...
PV-Tech - 2019年6月1日
China-based PV module manufacturer, Znshine PV tech has won a bid to supply solar panels to DEWA (Dubai Electricity and Water Authority) ...
Znshine Supplies 100MW Modules to Etihad Energy for ...
Sauenergy - 2019年5月31日



Znshine Solar Was the Top Module Sup 2018

Three Indian manufacturers also made it to the top 10 list of Mercom's 2018 market share leaders.

Branding and CSR



正 信

Zhèng

Fairness
Do the right thing

Xìn

Trust
Reliability

= Z(E)NSHINE

THANKS

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