

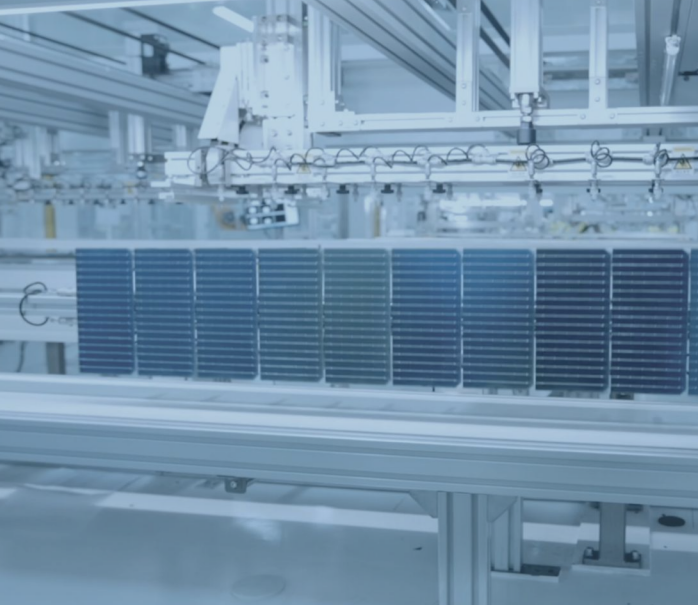


HY SOLAR **N**-TYPE NET-ZERO PV INDUSTRY INTEGRATOR

GRAND **O**RIGIN SYMBIOTIC FUTURE

www.hysolar.com





TO MAKE ENERGY **CLEANER**
TO MAKE THE WORLD **BETTER**



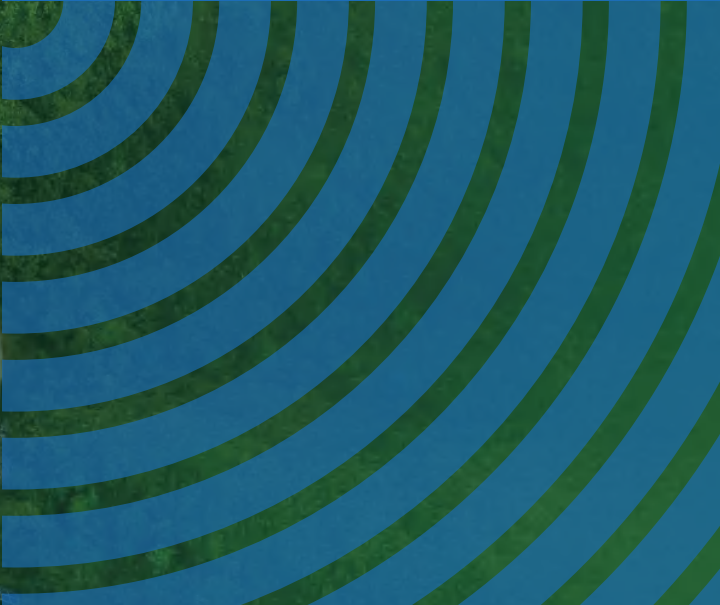
Carry Forward the Grand Vision

Let the sun turn every corner of the planet green



As the New Start Begins

Return the energy to its original green color



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Company Profile

About HY SOLAR

HY SOLAR, established in 2002, is a photovoltaic full-industry-chain ecological enterprise focusing on innovation and application in the new energy sector. It was listed on the Shanghai Stock Exchange in 2018 with the stock code 603185.

Currently, the company has assets nearing **4167** million USD, It employs over **10,000** people, with its products and services reaching nearly **100** countries and regions. The company has also established overseas marketing and technical service subsidiaries in more than ten countries worldwide.

2002
Company
Established

2004
• Began manufacturing crystalline silicon processing equipment
• Entered the photovoltaic industry

2018
Listed on the SSE main board

2019
Baotou Wafer Manufacturing Base Commenced Production

2020
Wafers obtained French ECS certification

2021
Selected as a National Green Factory

2023
• Baotou Silicon Material Manufacturing Base Commenced Production
• Xuzhou Cell Manufacturing Base Commenced Production
• Jiangyin Module Manufacturing Base Commenced Production
• Top 500 Chinese Manufacturing Companies
• Among the First Globally to Obtain TÜV's IEC Certification for Modules
• Modules rated "VERY GOOD" with 5 stars in PV Magazine testing

2024
• Global Top 500 New Energy Enterprises
• Global Top 100 PV Brands
• Top 20 Polysilicon and Wafer Brands
• China's Good PV "Annual Top Ten PV Cell Brands"
• Solar Energy Cup "Most Influential PV Module Enterprise"
• National Green Supply Chain Management Enterprise
• Five-Star Zero-Carbon Factory
• HT series modules received French ECS certification

Established a Complete Photovoltaic Industry Chain



Strategic Path

HY SOLAR has been deeply engaged in the photovoltaic industry for over 20 years, focusing on innovation and application in the new energy sector. It has built the most comprehensive N-type photovoltaic integrated industry chain.

HY 1.0 2002-2018 High-end PV Equipment Manufacturer	HY 2.0 2019-2021 Specialized Provider A New PV Materials	HY 3.0 2022-2025 Deeply Vertically-integrated PV Service Provider	HY 4.0 2026-Future Global Leader In Green Energy Ecosystem
<p>2002 Establishment of Wuxi Shangji Grinder Co., Ltd</p> <p>2004 Entry into the solar industry, engaging in the manufacturing of equipment for crystalline silicon</p> <p>2018 Wuxi Shangji Automation was listed on the SSE with stock code of 603185</p>	<p>2019 Establishment of HONGYUAN New Material (Baotou) Co.,Ltd. Entry into PV monocrystalline silicon industry</p> <p>2020 Expansion of monocrystalline silicon production capacity to 8GW per year</p> <p>2021 Expansion of monocrystalline silicon production capacity to 10GW per year</p>	<p>2022-2025</p> <ul style="list-style-type: none"> • Metallurgical-grade silicon with 150 kilotonnes annual output • High purity crystalline silicon with 100 kilotonnes annual output • Monocrystalline silicon wafer with 55GW annual output • N-TOPCon PV cell with 26GW annual output • N-TOPCon PV module with 13GW annual output 	<p>2026-Future</p> <ul style="list-style-type: none"> • Power plant development and creating a green energy industry ecosystem • Provide diverse green energy industrial system solutions

Globalization



Headquarters

Wuxi, Jiangsu, China

Global Marketing & Sales Center

Wuxi, Jiangsu, China

Overseas Regional Headquarters

Asia Pacific: Singapore

Europe: Germany

South America: Brazil

Oceania: Australia

Middle East & Africa: United Arab Emirates

Manufacturing Bases

Equipment Wuxi, Jiangsu, China

Slicing Baotou, Inner Mongolia, China

PV cell Xuzhou, Jiangsu, China

PV module Chuzhou, Anhui, China

Silicon Baotou, Inner Mongolia, China

Slicing Xuzhou, Jiangsu, China

PV cell Baotou, Inner Mongolia, China

PV module Baotou, Inner Mongolia, China

Silicon Ingots Baotou, Inner Mongolia, China

PV module Jiangyin, Jiangsu, China



Capacity Breakdown by Segment (as of end-2024)

150,000T
Industrial silicon

100,000T
Polysilicon

55GW
Wafers

26GW
PV cells

13GW
PV modules

N-type PV Industry Chain



Global Headquarters Base

Jiangsu
Wuxi



High-end Equipment Intelligent Manufacturing Base

Jiangsu
Wuxi

LAND
AREA **110^Km²**



Silicon Material Manufacturing Base

Inner Mongolia
Baotou

AMOUNT
INVESTED **1630^M USD** | LAND
AREA **1170^Km²**

METALLURGICAL-GRADE SILICON **150^Kt** | POLYCRYSTALLINE SILICON **100^Kt**
EXISTING CAPACITY EXISTING CAPACITY



PV Wafer Manufacturing Base

Inner Mongolia
Baotou

AMOUNT
INVESTED **3500^M USD** | LAND
AREA **810^Km²** | EXISTING
CAPACITY **55^{GW}**



PV Cell Manufacturing Base

Jiangsu
Xuzhou

AMOUNT
INVESTED **2100^M USD** | LAND
AREA **730^Km²** | EXISTING
CAPACITY **26^{GW}**



PV Module Manufacturing Base

Jiangsu
Jiangyin

Anhui
Chuzhou

AMOUNT
INVESTED **900^M USD** | LAND
AREA **500^Km²** | EXISTING
CAPACITY **13^{GW}**

Honors and Awards



TOP 500
Global New Energy Enterprises
2024 · Ranked 185th

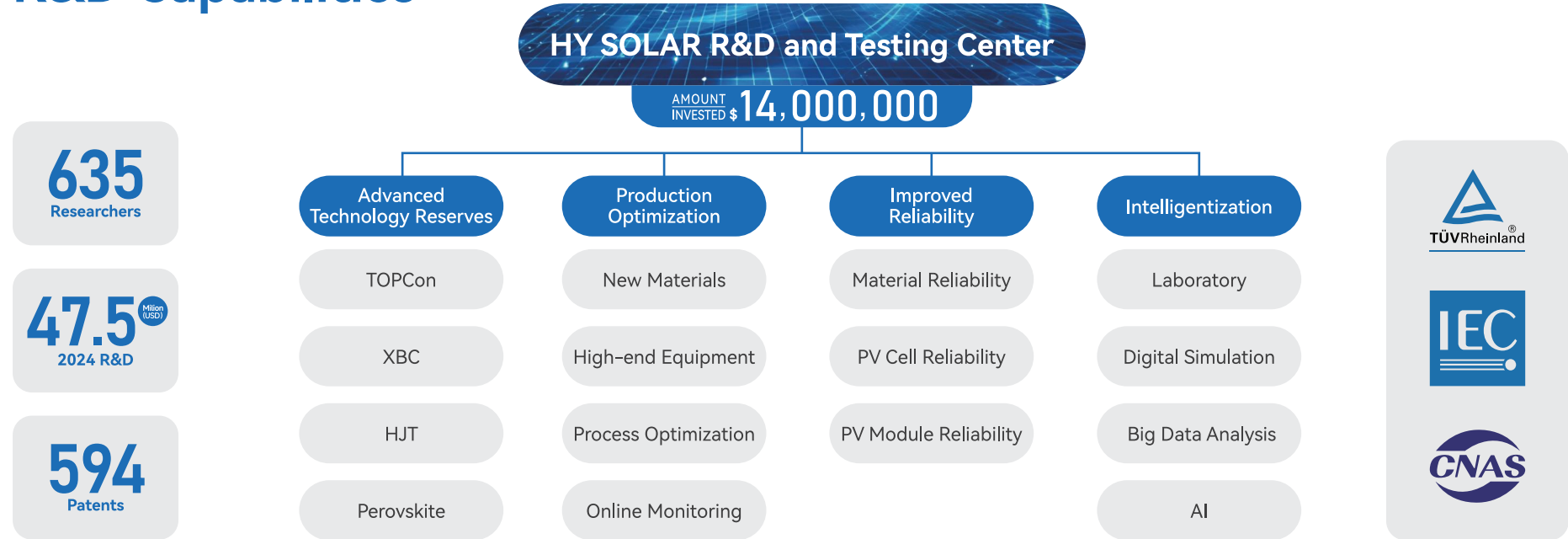
TOP 500
China Manufacturing Enterprises
2023



n2

Core Competence

R&D Capabilities



- It conforms to the construction and operation of **ISO17025** standards, and operates according to the requirements of **CNAS** certification system
- The laboratory covers an area of **5000** square meters, with a total of **58** sets of 28 kinds of equipment
- It has a full set of **IEC61215** and **IEC61730** standard testing capabilities

- The laboratory adopts a **LIMS** management system

All instruments and equipment, testing tasks, personnel, testing processes, data results and other information are incorporated into the digital management of the laboratory, so as to realize the efficient operation of the laboratory, improve the testing efficiency, help R&D carry out project test management, retrieval and analysis of test data, and provide decision-making support for product R&D

Leading in N-Type Route

TOPCon

Cutting-edge PECVD tech

26.9%

PV cell mass production efficiency 26.8%

LECO+0.25%

More than +0.25% increase in efficiency

High Yield +0.3%

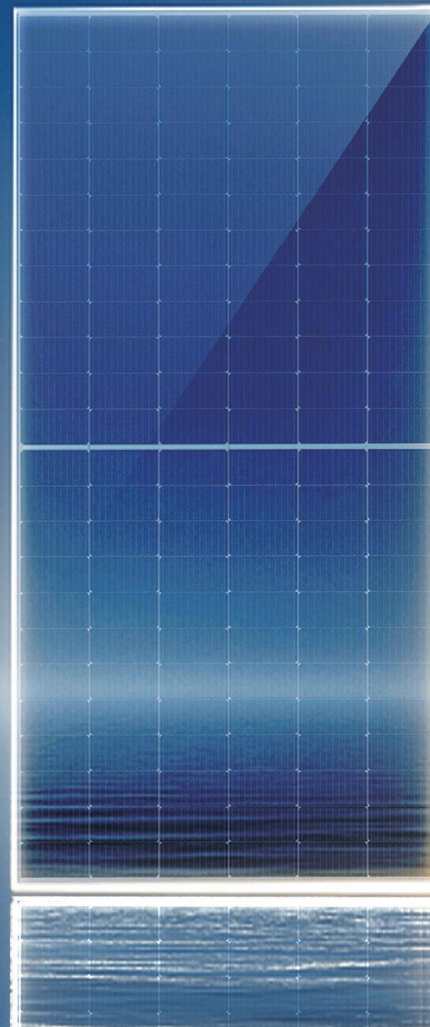
+0.3% increase in yield of pv cells

+30W

30W higher in efficiency
compared with PERC modules

26GW

TOPCON cell capacity



Full Industrial Chain Traceability

Traceability system of the entire industrial chain

Starting from self-produced silicon materials, the origin of production is clear, providing information traceability and transparency for the entire manufacturing chain of silicon wafers, cells, and modules. The process is fully traceable, monitorable, and precisely managed, meeting customer demands.



Silicon

- Own silicon materials
- 11N high purity
- Manufactured in Baotou, with legal and compliant labour practices

100,000 tons

PV Wafer

- Own silicon wafer capacity of
- Covers 100% N-type specifications
- Leading in industry with low carbon footprint

55 GW

PV Cell

- Own cell capacity of
- Utilizing PECVD technology
- Enhanced with LECO technology
- Efficiency up to 26.9%

26 GW

PV Module

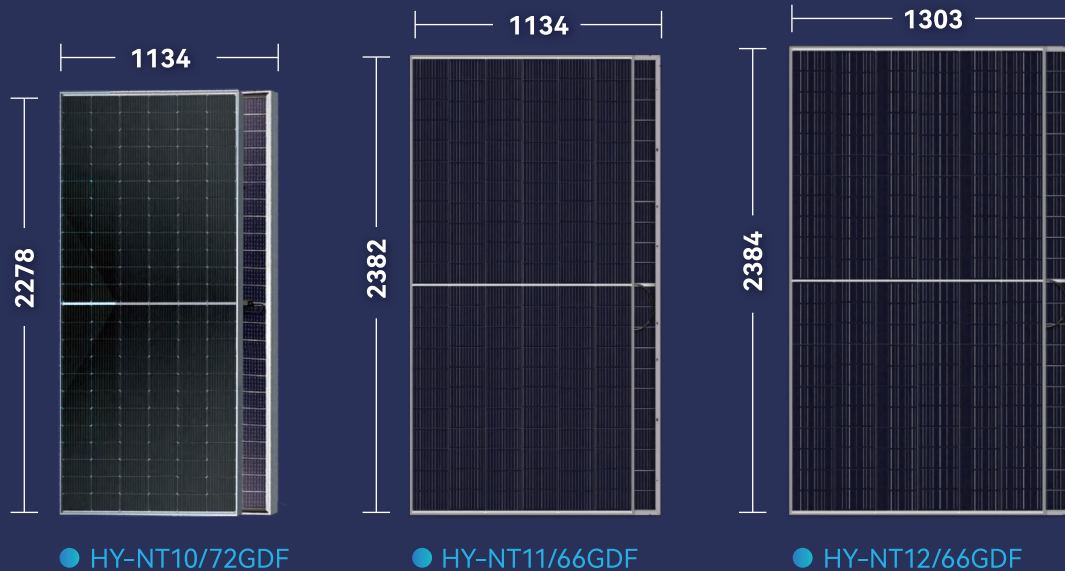
- Own module capacity of
- Full N-type coverage

13 GW

n.3

Module Products

HY SOLAR Main Products - TOPCon Modules



465W

HY-NT10/54BGDF

655W

HY-NT10/78GDF

515W

HY-NT10/60BGDF

630W

HY-NT11/66GDF

610W

HY-NT10/72GDF

725W

HY-NT12/66GDF

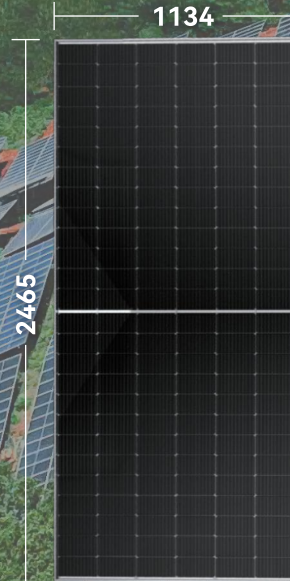
High-efficiency Module Series

large-scale ground power station



HY-NT10/72GDF

Power: 590-610W
Efficiency: 23.6%
Weight: 32.1kg



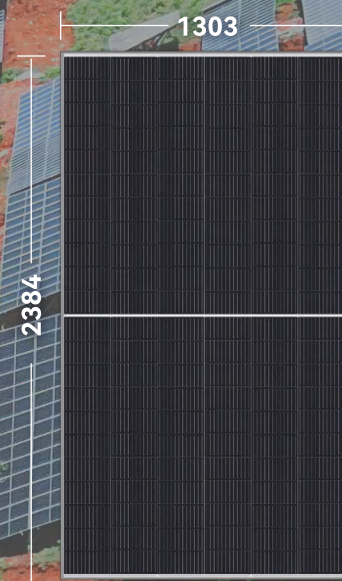
HY-NT10/78GDF

Power: 630-655W
Efficiency: 23.4%
Weight: 34.7kg



HY-NT11/66GDF

Power: 610-630W
Efficiency: 23.3%
Weight: 32.4kg

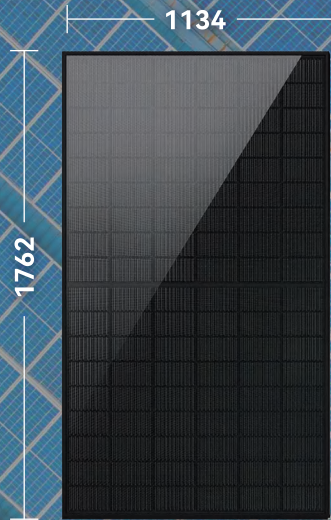


HY-NT12/66GDF

Power: 705-725W
Efficiency: 23.3%
Weight: 38.3kg

High-efficiency Module Series

Distributed and commercial industrial rooftops



HY-NT10/54BGDF

Power: 445-465W
Efficiency: 23.3%
Weight: 21.0kg



HY-NT10/60BGDF

Power: 495-515W
Efficiency: 23.3%
Weight: 26.5kg



HY-NT10/72GDF

Power: 590-610W
Efficiency: 23.6%
Weight: 32.1kg

New Module Series

Upgraded "PV+"

Scenario Applications

MARINE MODULE

Strong Wind Resistance, Wave Impact Resistance, Salt Mist Resistance
UV Aging Resistance, Superior Waterproofing & Light Transmission

610W

HY-NT10/72GDF

610W

HY-NT10/72GDF

ANTI-DUST MODULE

No A-side on short edges to prevent dust/water
Self-cleaning design with minimal maintenance

630W

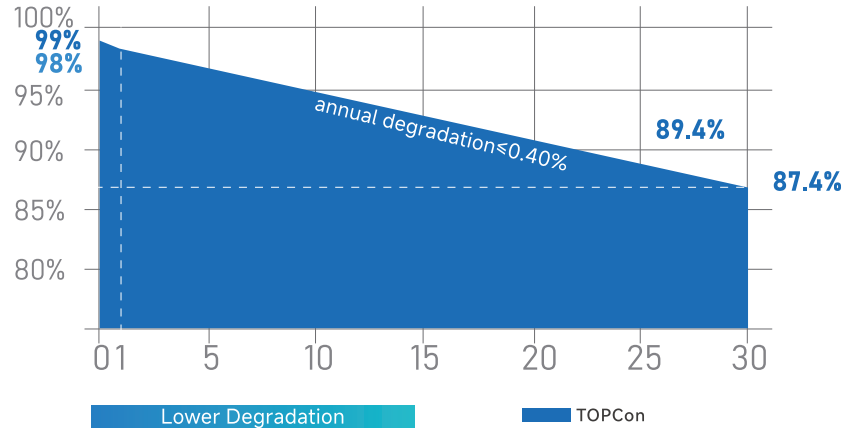
HY-NT11/66GDF

ANTI-GLARE MODULE

High-transparency Anti-reflective Glass
For Enhanced Glare Reduction

Optimized for airports, highways,
and PV applications

Reliable Quality and Longer Warranty



Warranty for N-type TOPCon modules

15^y material and process warranty, **30^y** performance warranty

30^y material and process warranty, **30^y** performance warranty
for some small-sized modules used on residential roofs in certain regions
 $\leq 1\%$ first year degradation, $\leq 0.4\%$ subsequent annual degradation

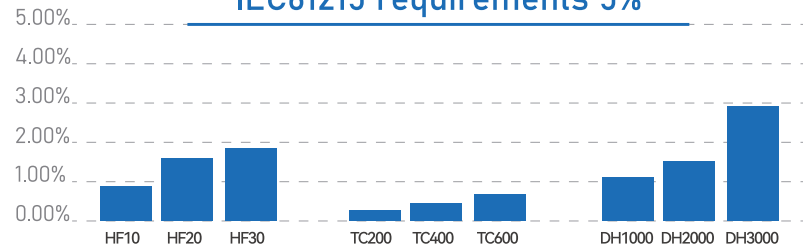
$\geq 87.40\%$ of initial output after 30 years

30^y
Power Warranty

$\leq 1\%$ 1st year degradation

0.4% Linear degradation

IEC61215 requirements 5%



Stricter Testing Demonstrates Outstanding Performance

According to IEC61215 standard test,
Modules exhibit
outstanding reliability performance

- IEC61215 Test
- IEC Test triple as demanding

Outstanding
Reliability
Performance

Certifications

HY SOLAR has persisted on TOPCon as the primary technical direction of solar modules, and has received industry recognition for the "efficient" product performance. Meanwhile, our thorough global certification and increasingly abundant production capacity allow us to maintain our high-quality market dominance in the module application areas.

Product Certifications



System Certifications



ISO 9001

Quality assurance systems

ISO 14001

Environmental management systems

IEC/TS 62941

PV module manufacturing quality system

ISO 45001

Occupational health and safety management systems

Quality Assurance

Munich RE



All-scenario Applications

HY SOLAR's N-type products provide comprehensive solutions for all scenarios, covering distributed residential rooftops, commercial and industrial applications, large-scale centralized ground-mounted power stations, and various "PV+" application scenarios. The products are also tailored with customized R&D and technological upgrades for special environments, ensuring a more precise match to customer needs and maximizing customer value.



○
Mountain
PV Power Plants



○
Utility-Scale
PV Power Plants



○
Commercial Distributed
PV Power Plants



○
Residential Distributed
PV Power Plants



○
Agri-PV
Applications



○
PV + Desertification
Control Applications



○
Freshwater Lake
PV Applications



○
Offshore
PV Applications

N4

Green Ecosystem

Sustainable Development

HY Solar has always upheld the vision of "Making Energy Cleaner, Making the World Better," driving sustainable development with green energy and striving to build a high-quality model for sustainable growth. The company has deeply integrated ESG principles into its strategic planning and daily operations, having published ESG sustainability reports for three consecutive years.



Friendly Environment

The investment in environmental protection will reach in 2024

10.7 Million
(USD)

A full range of silicon wafer products, HT series modules

Passed the French ECS carbon footprint certification

HY Solar Energy awarded
Five-Star Zero-Carbon Factory Certificate

HY New Materials awarded
National Green Manufacturing Green Supply Chain Management Enterprise

Shared Value

Social contributions and charitable donations have reached

20000k+

Normalization of volunteer service, annual service hours

500h+



To walk with the light Driving the green world forward

We,
concentrate on the source of novel
concepts for deep cultivation in order to
consistently break through energy barriers.

We,
with the unwavering source of innovation,
have fostered a bigger green dream;

We,
protect every source of energy from
nature, investigate the mystery of sunlight,
And return to nature with gifts from nature,
so that each share of clean energy can be
turned into the original green form.



170^{GW}

the shipment volume
of PV wafer reach
170GW



31.38^{million}

Equivalent to saving
standard coal by
31.38 million tonnes



14.54^{million}

Equivalent to cutting
CO2 emissions by
14.54 million tonnes



7300^{million}

Equivalent to
7300 million trees
planted in the forest

Global Partners

HY SOLAR





Wechat(CN)



Wechat Channel



Wechat(EN)



LinkedIn



Twitter



YouTube

Group Headquarters

- Building 7, Changguangxi Wetland Park, Lihu Avenue, Binhu District, Wuxi City, Jiangsu Province, China

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Midstream And Upstream Manufacturing Bases

- **Silicon:** WeiEr Road, Jinshan Industrial Park, Jinshan Town, Guyang County, Baotou City, Inner Mongolia
- **PV wafer:** 1 South Park Road, New Planning Area, Equipment Manufacturing Industrial Park, Qingshan District, Baotou City, Inner Mongolia
- **PV cell:** 88 Jinfeng Road, Economic and Technological Development Zone, Xuzhou City, Jiangsu Province

Module Manufacturing Bases

- 1159 Gangcheng Avenue, Jiangyin City, Jiangsu Province
- 99 Jiuzi Road, Dingcheng Economic Development Zone, Dingyuan County, Chuzhou City, Anhui Province