## A Global Solar Energy Provider

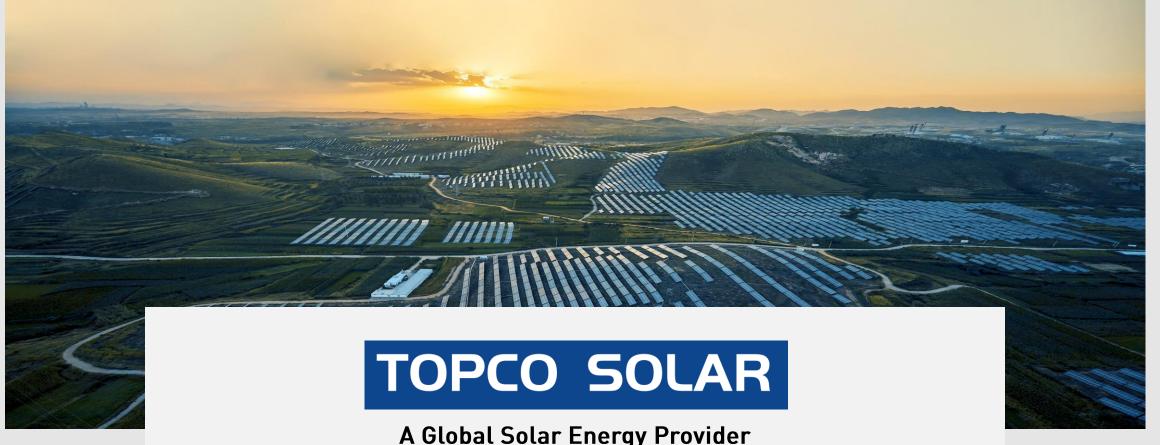
# Topco Solar

Version@20220805 www.topcosolar.com

# 01

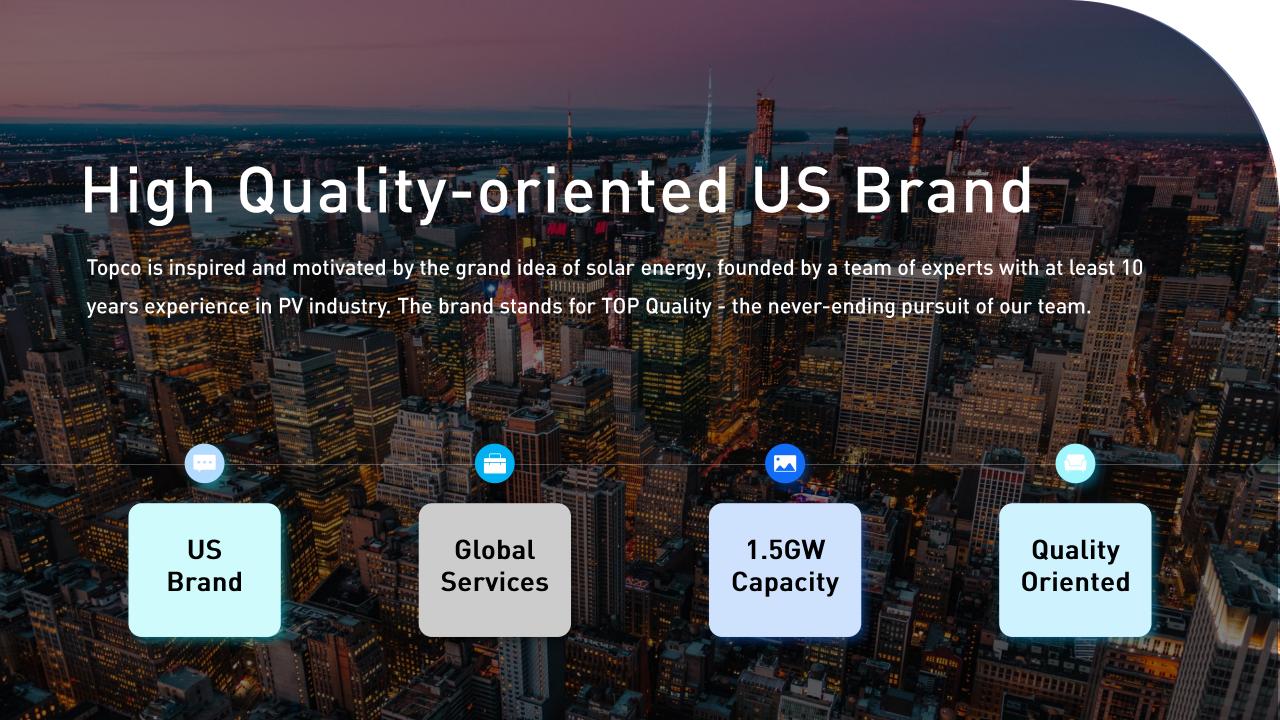
## WHO WE ARE

A Global Clean Energy Products and Services Provider



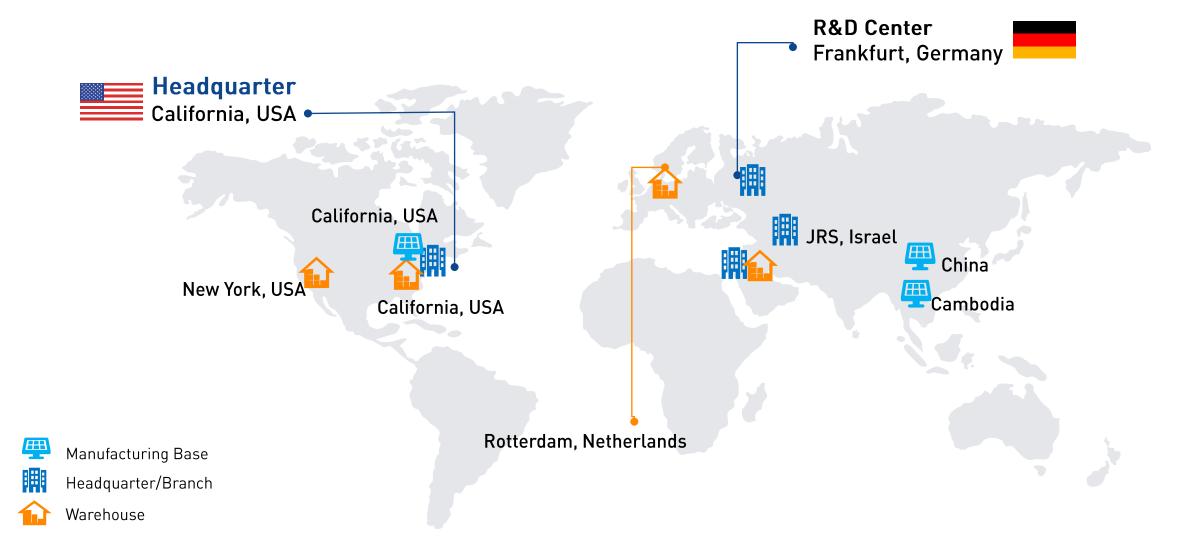
### A Global Solar Energy Provider

Topco Solar produces a wide range of PV modules that are suitable for all system types including residential, commercial, industrial and utility system. All panels are built in a modern facility with the latest technology for soldering, laminating, and framing, combined with a committed workforce. Topco Solar ensures your solar panels operate with uncompromised performance and dependable results.



### **Global Network**

### **TOPCO SOLAR**



### **Key Customer Value**

### **TOPCO SOLAR**

01.

#### **Increase Scale Returns**

Reduce the complexity of products and improve economies of scale through standardization, modularization and serialization

02.

### Improve Project Profitability

Efficient demand forecasting, inventory management, and supply chain execution lead to better product prices, higher execution efficiency, and increased power station profitability

03.

### **All-round Supply Service**

strong ability to control the logistics of sea and land transportation. Through Topco Solar warehouses can be set up within one kilometer of the surrounding area to support JIT delivery



# 02

## PRODUCTS AND TECHNOLOGY

Global Leading Solar Module High Technology

### **High Efficiency Solar Modules**

### **TOPCO SOLAR**

## S-series

Singled Solar Module

Incorporating Shingling technology and flexible adhesive, give rise to high density layout

420-675W



## H-series

Half-cut Solar Module

Advanced module technology delivers superior module efficiency

420-675W



### TOPCO SOLAR

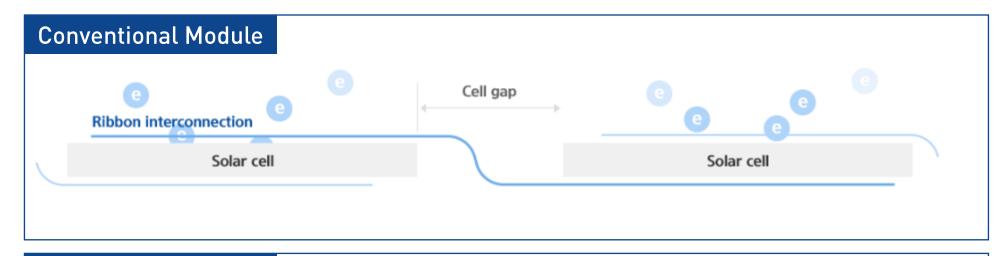
## S-series

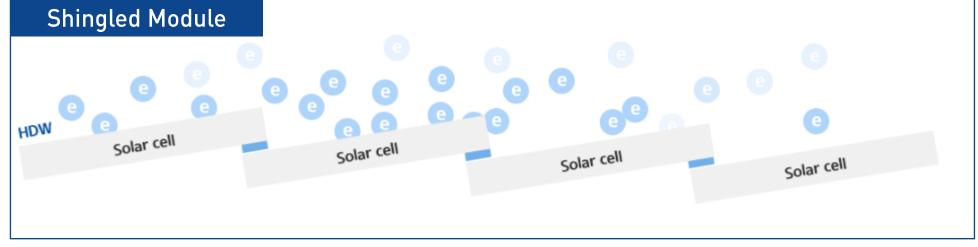
High Efficiency Shingled Module



### **Shingling Technology**

High Efficiency Module with Increased Active Area







## Shingling Technology

The Topco Solar S-series modules applied shingled technology, which uses laser slicing to cut the whole cell into several cell strips and uses conductive glue to flexibly connect the cell strips in a limited area through lamination, to achieve a cell spacing close to zero.



High Efficiency



Guaranteed Reliability



Eco-friendly

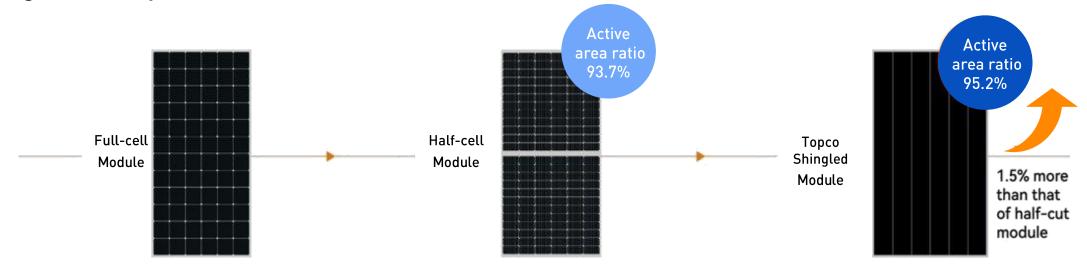


**Aesthetic Value** 

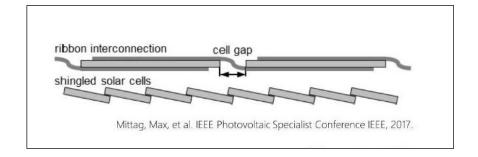
### **TOPCO SOLAR**

### **Shingling Technology**

High Efficiency Module with Increased Active Area



Making full use of the limited area of the module, place 5% more cells and effectively increasing the light-receiving area of the module; absence of busbar reduces shading area and enhance absorbing area, increase power output by 20W-25W meanwhile improve module efficiency





# Guaranteed Reliability



### Low Risk of Hot Spot

The shingling technology utilizes fully parallel circuit design, which has better degradation, less hot spot and improved performance under low-light



### Low Micro-crack Risk

The cells are flexibly connected by conductive adhesive, no soldering ribbon is used, lower the risk of micro crack. Thus, Topco solar can provide 30-year liner power warranty for shingled solar module.



### **Lower Operating Temperature**

Using conductive glue to realize the interconnection of the cell slices, which reduces the loss during electricity transmission and effectively reduces the heat loss.

### **TOPCO SOLAR**







No ribbons are used, reduces 60% of the use in the production process of module, which is environmentally friendly.



## Aesthetic Value

The cell layout of the shingled module is not limited, vertical and horizontal structure are both feasible.

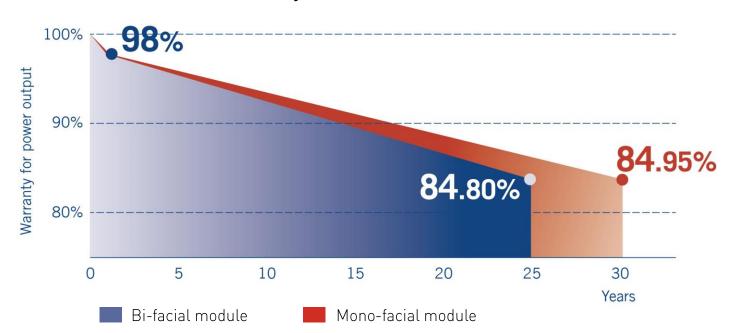
As its surface is not blocked by busbar or ribbon, the appearance is highly consistent, high density and less cell gap give rise to the aesthetic value.



### **Certification and Warranty**

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< 2%

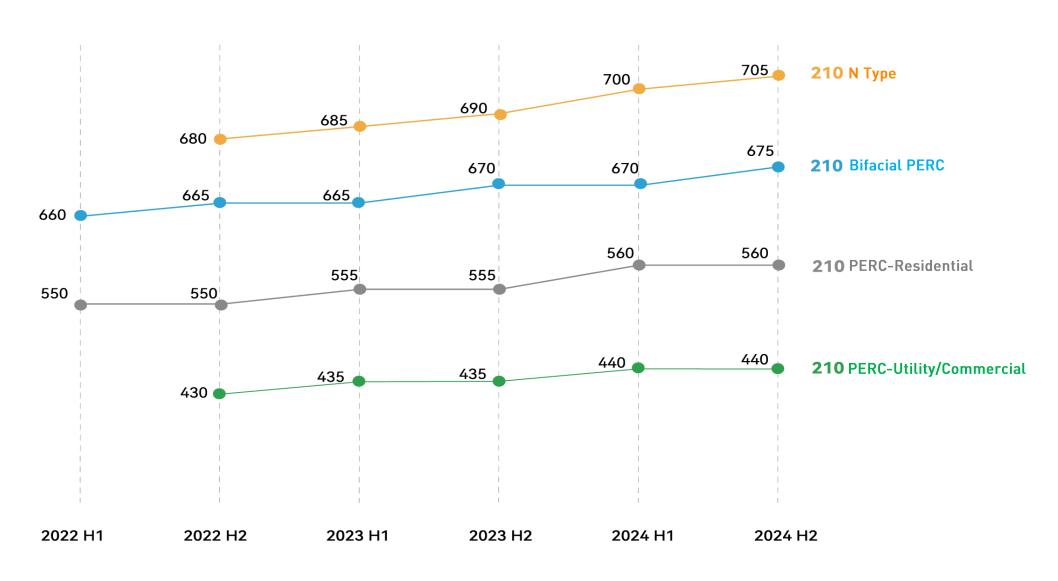
1st year degradation

< -0.55%

Linear annual degradation after the 1st year

### **Product Roadmap**

### **TOPCO SOLAR**





# 03

## **PROJECT REFERENCES**

A Global Clean Energy Products and Services Provider



## RESIDENTIAL

Location: Brazil

Estimated CO2 Reduced Annually: 12.0 Tons

**10KW** 

## RESIDENTIAL

Location: Madrid, Spain

Estimated CO2 Reduced Annually: 9.3 Tons

7.8KW





## **COMMERCIAL**

Location: Netherlands

Estimated CO2 Reduced Annually: 993 Tons

0.83MW

## **RESIDENTIAL**

Location: Australia

Estimated CO2 Reduced Annually: 12.6 Tons

10.53KW





## **FLOATING**

Location: Si Hong, Jiangsu Province, China Estimated CO2 Reduced Annually: 239,280 Tons

200MW

## **GROUND-MOUNTED**

Location: Marlow, England

Estimated CO2 Reduced Annually: 2,273.2 Tons

1.9MW





## **FLOATING**

Location: Si Hong, Jiangsu Province, China Estimated CO2 Reduced Annually: 239,280 Tons

**60MW** 

## **GROUND-MOUNTED**

Location: Ding An, Hainan Province, China Estimated CO2 Reduced Annually: 71,784 Tons

**20MW** 



### TOPCO SOLAR



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