

# INTELLIGENT PV & STORAGE POWER SYSTEM

## HEGATECH

A PROFESSIONAL PV POWER SYSTEM SOLUTION PROVIDER

IMAGINATION  
INSPIRES  
CREATIVITY

WUXI CITY HEGUANG NEW ENERGY TECHNOLOGY CO., LTD.

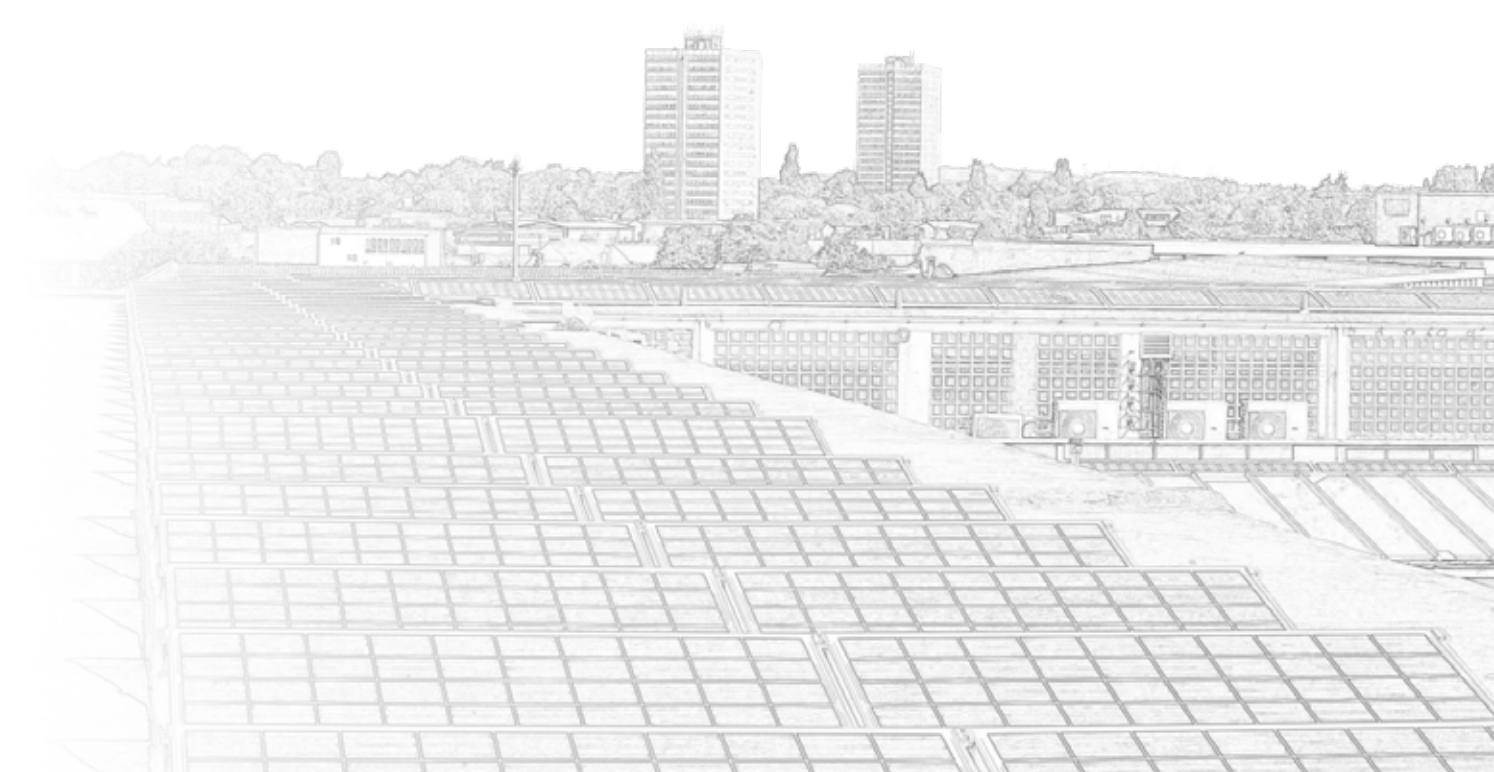
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# 1.

## "Carbon neutrality" and booming new energy surge under energy security

Under the growing tension over global energy, many industry leaders are paying more and more attention to decarbonization, "clean" technologies, and fully renewable resources, meanwhile continuously exploring the possibility of a permanent shift to zero-carbon renewable energies. Following the trend, executives and investors in the energy industry around the world are adjusting their energy transformation strategies in order to secure adequate energy supplies in the short term, preferably low carbon.

Facing the fierce geopolitical and economic competitions, as the major form of new energy, PV power is urgently needed worldwide, especially in Europe and the U.S. Speeding up the localization of full supply chain in PV industry is not only critical to national energy security, but also necessary for the development of high-end manufacturing and the participation in the global new energy competition in the future.

At a time when mankind is facing a tough challenge of the energy consumption gap, we still have a magic solution to the problem of supply-demand matching of electric power, i.e., creating a new power system that is secure, clean, reliable, and intelligent by extensively developing PV and energy storage technology, digitalizing and intellectualizing the power system, as well as coordinating the integration of load and storage between source and network from the top level.

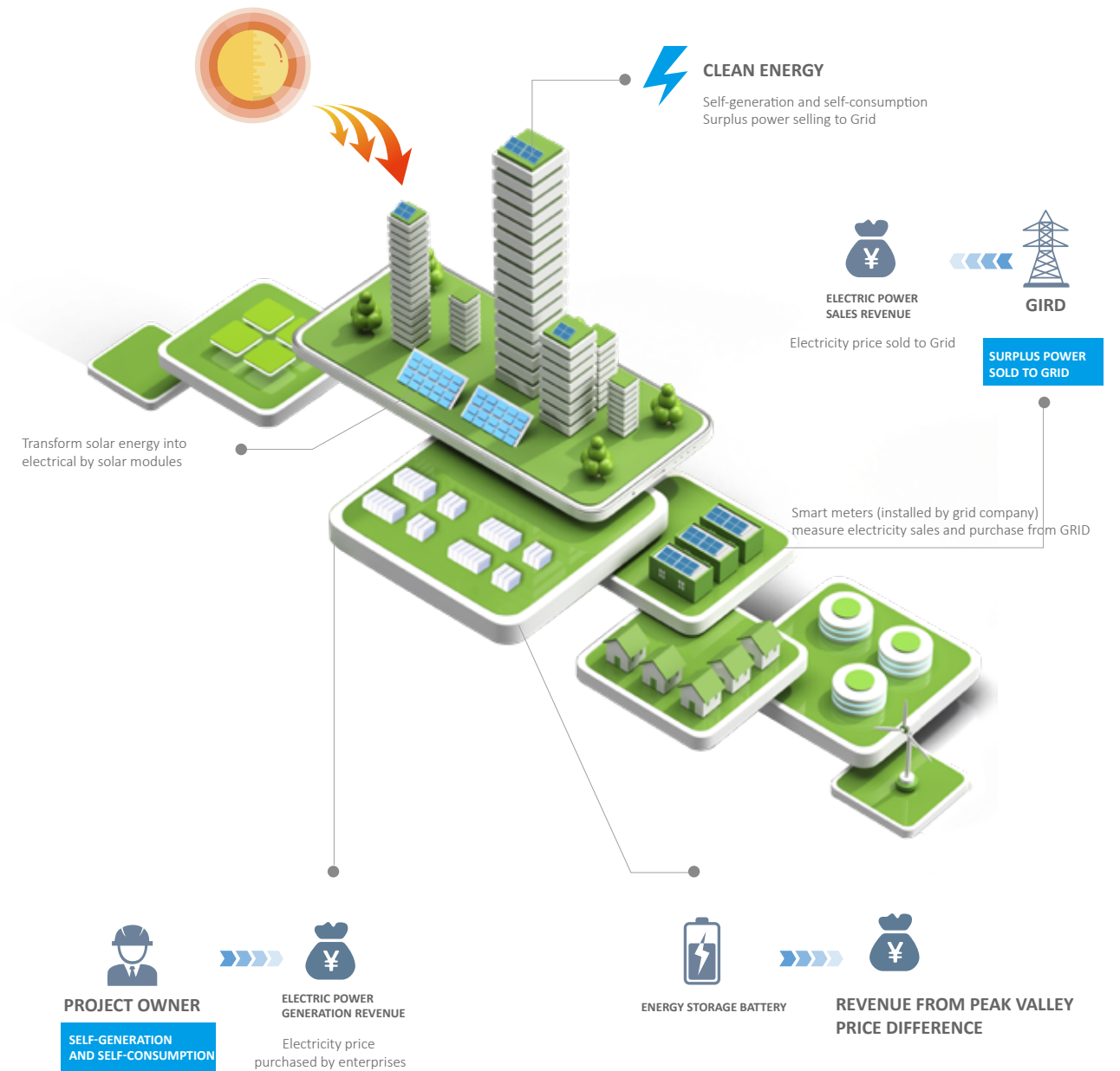
Relying on rich experiences in PV projects and robust industry chain, HEGATECH matches the high-performance PV power plant system products from the sources and is committed to providing secure and intelligent power system solutions for industrial and commercial purposes. HEGATECH helps customers build up new energy power system with full life cycle services by providing "one-stop" PV and energy storage (or PV only) power plant solutions.

# 2.

## Industrial and commercial PV with Energy storage application mode

# 2

## ECONOMIC VALUE OF PV POWER SYSTEM



# INDUSTRY & COMMERCIAL PV POWER SYSTEM



## ECONOMIC VALUE OF INDUSTRIAL AND COMMERCIAL PV POWER PROJECTS

### FIXED ASSETS INCREASEMENT

- Revitalize roof resources and increase enterprise income
- High revenue: 1MW PV system/ annual income is about 126 thousand €
- Long-term revenue: short-term investment, long-term revenue of 25 years, total revenue is about 3.17 million €
- Short return cycle: Be benefits in quick return
- Low investment risk: Guaranteed revenue

### CARBON EMISSIONS TRADING

For key emission companies such as petrochemical, chemical, building materials, steel, non-ferrous metals, paper making, electricity, aviation, and others, it could save costs by purchasing carbon emissions. The green energy generated by PV power system can be sold as carbon emission allowances, it could be listed and be profited.

## ENVIRONMENTAL VALUE OF INDUSTRIAL AND COMMERCIAL PV POWER PROJECTS

- lower the temperature and save the air conditioning fee
- Protect the roof and save maintenance fee
- Green Energy to each investor



# BUSSINESS MODE

**SPPA ( SOLAR POWER PURCHASE AGREEMENT)**  
The owner's roof is rented for free, and the PV power station provides the owner with electricity at a low price.

- Advantage :
  - Electricity discount to cost
  - Financial risk-free
  - No investment

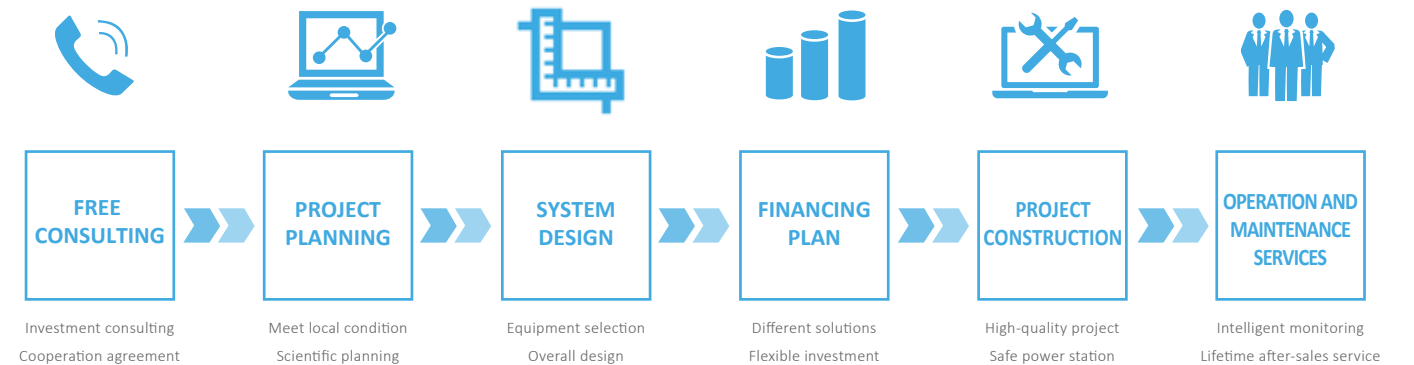
**MUTUAL COOPERATION MODE**  
Jointly invest in the rooftop power station, and share the power station income

- Advantage :
  - Construction can begin with low investment amount
  - Low electricity prices save cost and get a part of revenue

**ENTERPRISE INVESTMENT MODE**

- Advantage :
  - High return on investment, short payback period

## ONE-STOP SOLUTION MAKES INVESTMENT EASIER



## REVENUE MODEL

500KW industrial rooftop PV project in Wuxi, Jiangsu

| COOPERATION MODE                        | ENERGY MANAGEMENT | CO-CONSTRUCTION | INVESTMENT BY FACTORY |
|---|-------------------|-----------------|-----------------------|
| Construction scale (kW)                 | 500               | 500             | 500                   |
| Land area (m <sup>2</sup> )             | 5,000             | 5,000           | 5,000                 |
| Construction investment (CNY)           | 1,900,000         | 1,900,000       | 1,900,000             |
| Self-use rate                           | 90%               | 90%             | 90%                   |
| First year power generation (kWh)       | 530,000           | 530,000         | 530,000               |
| Electricity price(CNY/kWh)              | 0.84              | 0.84            | 0.84                  |
| Electricity preferential price(CNY/kWh) | 0.72              | 0.72            | —                     |
| Saving electricity price(CNY/kWh)       | 0.12              | 0.12            | —                     |
| Annual electricity fee savings (CNY)    | 57,240.00         | 57,240.00       | 400,680.00            |
| 25yrs electricity fee savings (CNY)     | 1,431,000         | 1,431,000       | 10,017,000            |
| De-sulfur electricity price(CNY)        | —                 | —               | 518,075.00            |
| ROI period                              | 7 years           | 7 years         | 5.5 years             |

- Emission reduction: Each electricity generation of 1 kwh= 0.35kg of standard coal=0.997kg of CO<sub>2</sub>=0.03 kg of SO<sub>2</sub>
- Thermal insulation: The roof covered by PV modules which has good ability of thermal insulation and energy consumption reduction.
- Investment cost is effected by market changes.

## COOPERATION





# 3.

## HEGATECH NEW ENERGY

# 3.1

## COMPANY PROFILE

### WUXI CITY HEGUANG NEW ENERGY TECHNOLOGY CO., LTD.



Founded in 2013, HEGATECH is engaged in the R&D, production and sales of solar products from silicon filament, silicon rod, graphite and quartz products to solar modules and PV system related products in PV industry, providing professional PV industry chain solutions for global customers. We are committed to being a global leader in PV industry.

Relying on the integration and optimization of superior resources of PV industry, HEGATECH adheres to empowering customers more value with an vertically integrated whole industry service platform. HEGATECH's products are sold to more than 20 countries around the world such as Europe, North Africa and Asia & Pacific. We are experienced in the development and investment of PV Power System including industrial & commercial and residential PV system, while actively expanding the diverse-field application scenarios of PV products.

With the aspiration of achieving a global green future, HEGATECH strategically layouts the core industry links of PV industry chain to improve the company's competitiveness, and create new strengths. We continuously contribute to optimize power consumption to a clean energy times.

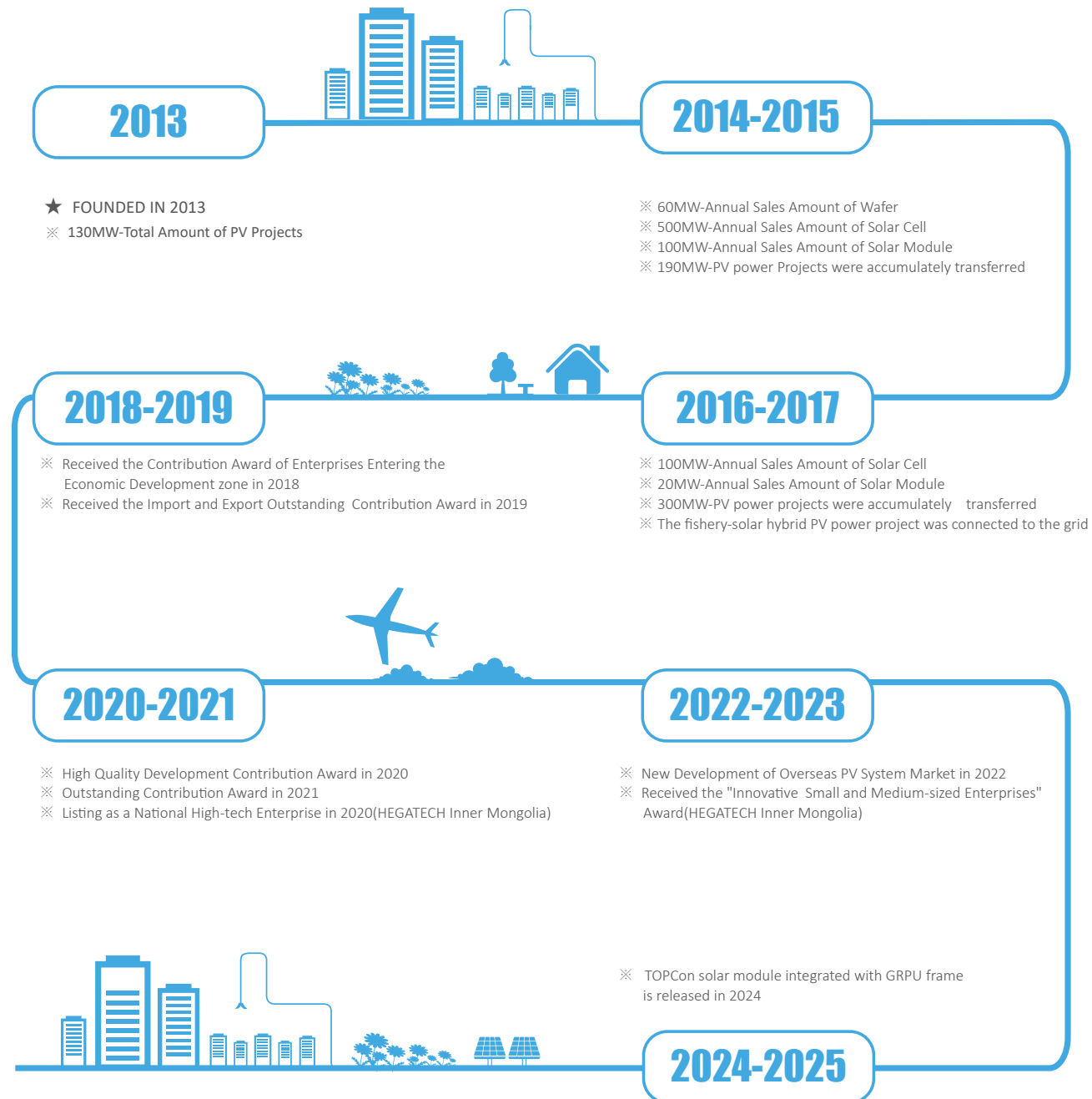
## HONOUR



- 2018** 2008-2018 Park Entry Enterprise Contribution Award
- 2019** Enterprise with Outstanding Contribution for Foreign Trade Outstanding Contribution Award
- 2020** External Contribution Award for High Quality Developm  
**High-Tech Enterprise Qualification**(HEGATECH Inner Mongolia)
- 2021** External Contribution Award for High Quality Developm
- 2022** **Innovative Small and Medium-sized Enterprise Award**  
(HEGATECH Inner Mongolia)  
**The "SRDI"enterprise Award** (HEGATECH Inner Mongolia)  
44 invention and utility model patents in total(HEGATECH Inner Mongolia)

# 3.2

## DEVELOPMENT HISTORY



# 3.3

## PRODUCTION BASES & GLOBAL MARKET



### Global Market and Sales Network

|          |          |           |             |                          |                       |
|----------|----------|-----------|-------------|--------------------------|-----------------------|
| Germany  | Russia   | India     | Japan       | Changji, Xinjiang        | Xining, Qinghai       |
| Poland   | Bulgaria | Vietnam   | Palau       | Urumqi, Xinjiang         | Leshan, Sichuan       |
| Italy    | Egypt    | Malaysia  | South Korea | Baotou, Inner Mongolia   | Baoshan, Yunnan       |
| France   | UAE      | Australia | Kazakhstan  | Bayannur, Inner Mongolia | Ordos, Inner Mongolia |
| Portugal | Congo    |           |             |                          |                       |

### Production Bases

|   |  |
|---|--|
| Inner Mongolia Heguang New Energy Co., Ltd          | Ninaxia Heguang Quartz Technology Co., Ltd               |
| Inner Mongolia Heguang Graphite Technology Co., Ltd | Jiangyin Fangxin PV Technology Co., Ltd                  |
| Ninaxia Heguang New Material Co., Ltd               | Jiangsu Hetong New Energy Co., Ltd                       |
| Ningxia Hejia New Energy Co., Ltd                   | Wuxi Heguang Intelligent Equipment Manufacturing Co. Ltd |



# 4

## PROJECT CASES



| 和光新能源分布式光伏项目案例

# 4.

## PROJECT CASES

**2.6 MW**  
Yilin Aluminum Industry Factory Rooftop PV Power System  
Grid-connected in 2013

**4.2 MW**  
Bosideng Logistics Factory Rooftop PV Power System  
Grid-connected in 2017

**5.3 MW**  
Bosideng Clothing Company Rooftop PV Power System  
Grid-connected in 2017

**1.0 MW**  
Xinchao New Energy Factory Rooftop PV Power System  
Grid-connected in 2018

**0.4 MW**  
Zhangjiagang Xinchangmaoye Factory Rooftop PV Power System  
Grid-connected in 2023

**0.3 MW**  
Commercial PV Power System in Poland  
Grid-connected in 2023

**2.0 MW**  
Yonghui textile Factory Rooftop PV Power System  
Grid-connected in 2018

**1.4 MW**  
Wuxi KIPOR Factory Rooftop PV Power System  
Grid-connected in 2019

**3.3 MW**  
Weike Group Factory Rooftop PV Power System  
Grid-connected in 2019

**3.2 MW**  
Wuxi Yulong Steel Factory Rooftop PV Power Project  
Grid-connected in 2014

**0.3 MW**  
Wuxi Sunlit Factory Rooftop PV Power System  
Grid-connected in 2023

## RESIDENTIAL PV POWER SYSTEMS



Project: Residential PV Power System in Palau I II  
 Location: Palau  
 Capacity: 2MW  
 Grid Connection Time: 2022/2023



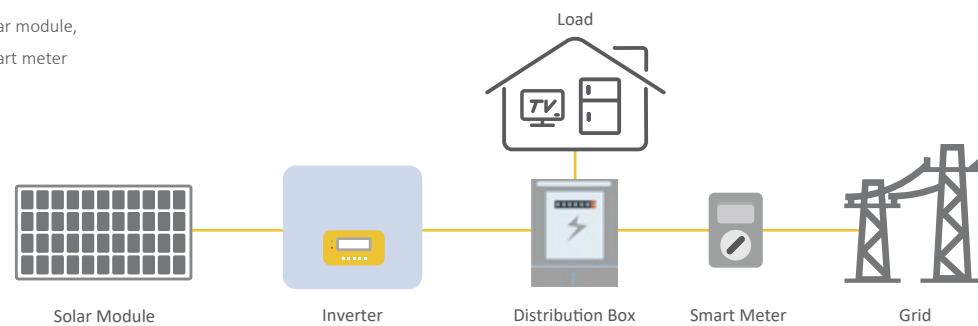
Project: Residential PV Power System in Germany  
 Location: Germany  
 Capacity: 7KW  
 Grid Connection Time: 2023



Project: Clinic Rooftop PV Power System in Portugal  
 Location: Portugal  
 Capacity: 25KW  
 Grid Connection Time: 2023

### System Schematic Diagram

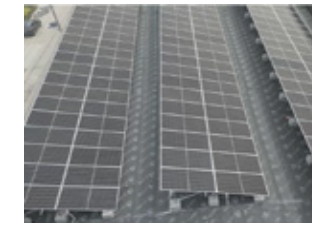
- The PV system consists of solar module, inverter, distribution box, smart meter and other equipment



## INDUSTRIAL & COMMERCIAL PV POWER SYSTEMS



Project: Sunlit Factory Rooftop PV Power System in Wuxi  
 Location: Jiangsu, China  
 Capacity: 0.3MW  
 Grid Connection Time: 2023



Project: Xinchangmaoye Factory Roof PV Power System in Zhangjiagang  
 Location: Jiangsu, China  
 Capacity: 0.4MW  
 Grid Connection Time: 2023



Project: Commercial PV Power System in Poland  
 Location: Poland  
 Capacity: 360kW  
 Grid Connection Time: 2023.07

### System Schematic Diagram

- The system includes solar modules, inverters, PV grid-connected cabinet, smart meter and other equipment

