

### **About ASI**





Our Vision: To be a primary supplier for a complete solar and hybrid energy solution

Our Purpose: Customer satisfaction, superior product quality

Our Spirit: Endless efforts to scale new heights

Our Values: Value for money and share benefits

Our Strategic Target: Be a leading global operation and service provider of clean energy



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#### **About ASI**

ASI Clean Energy, a wholly owned subsidiary of ASI International, was founded in 2010. Through more than 15 years of innovation and development, we have established a fantastic network of leading photovoltaic manufacturers,

We work with a Tier 1 module supplier, one of China's largest photovoltaic power station developers, and a first-class leader among China's photovoltaic manufacturers.

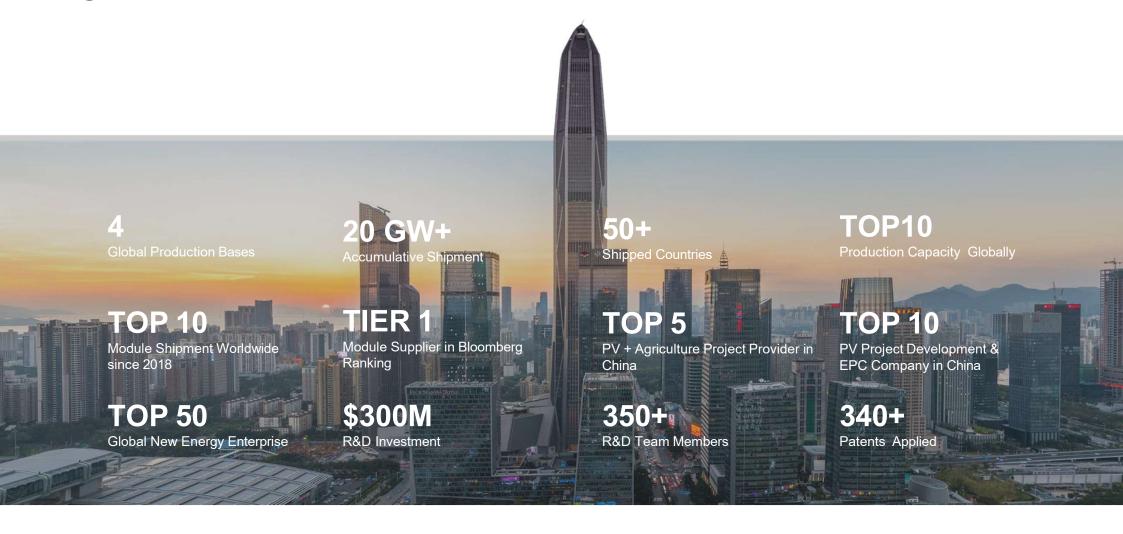
Our downstream business includes solar photovoltaic project development, design, EPC construction, operation & maintenance and one-stop system integration solutions for customers.

ASI continues to push the decrease of solar energy cost, and makes contributions to the development of global clean and environment-friendly energy.





## Our global reach



## **Core Competitiveness**



### **Global Network**

- 50+ countries/regions for product shipment, 45+ associate branches and offices all over the world
- ASI provides customers with localized service & support, backed by its global sales network
- · Strong after-sales service network with rapid response
- Long-term partnership with China's state-owned enterprises and clean energy suppliers



## **Solid Financial Strength**

- Long-term cooperation with world's major banks and other financial institutions
- · Considerable bank credit scale around the globe
- Diversified financial channels including finance lease, merger & acquisition fund



## **Leading Manufacturing**

- Top 10 PV manufacturer and supplier in the world
- China's tier-1 PV manufacturer, one of the largest PV power plant developers in China
- The reliable quality of solar modules ensures continuous power output for 25-30 years



## **Smart Solar Energy Solutions**

- Smart solar solutions covers the full lifecycle of the plant, maximizing the revenue and optimizing the LCOE
- With customized solutions, ASI provides customers with safe, reliable and cost-effective green energy



#### **Products & Solutions**



#### **Solar Module**

As global leading PV module manufacturer, ASI offers solar products with world-class quality and performance



#### **Diversified solutions**

ASI is dedicated to provide global customers with one-stop customized and smart solar energy solutions



### **Solar Storage**

ASI offers high-efficiency, reliable and customized solar storage solutions





## **Strategic Direction**



ASI's solar panel production capacity is vertically integrated in a creatively flexible way. From materials to cells and solar modules, ASI has GW-capacity production facilities throughout global. ASI dynamically stabilize our supply chain to mitigate risk and add value. ASI supplies a wide variety of PV modules ideally suited for all types of installations: residential, commercial, industrial and utility. Since 2010, more than 20 GW+ modules have been installed in thousands of residential, commercial, and utility-scale solar applications worldwide.

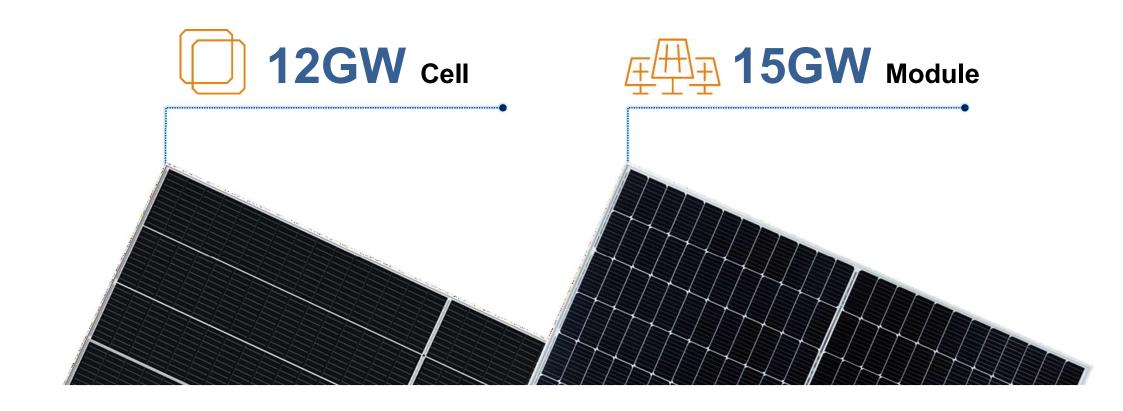
ASI smart energy solutions provide horizontally integrated one-stop solution services throughout entire lifecycle of a solar power plant, from project development, project financing and investment, project design and engineering, procurement and construction management, to project operation and maintenance services. Backed by a decade of knowledge and experience in solar module production, expertise and skills in EPC, ASI smart energy solutions propose services enabling worldwide solar projects to be realized, and innovations throughout the entire project lifecycle optimizing each project's LCOE.



More Efficiency, Higher Capacity

# $\Lambda SI$

## **Flexible Module Production Capacity**





## **Strategic Goals**

# The World-leading PV Module Manufacturer





## **Product Portfolio**

## **Comprehensive Product Portfolio**

ASI offers a wide variety solar modules, enabling it to meet the diversified requirements of all categories of solar installations: residential, commercial and utility.

As a leading solar module supplier, ASI has been developing state- ofthe-art technologies and launched innovative solar products into the global PV market.





### **Diversified Solar Modules**

## A Rich Product Portfolio to Meet the Diversified Needs of Customers



Product Type

MBB 120 / 132 / 144 / 156 Cells

M6 / M10 / G12



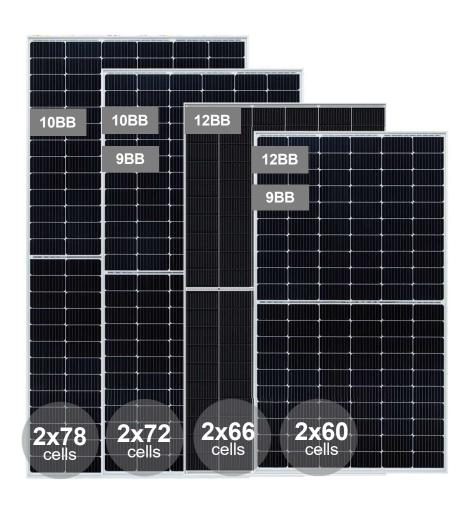
Product Type

MBB 120 / 132 / 144 / 156 Cells

M6 / M10 / G12



#### **BIPRO Series**



### **Product Model**

320W-665W

BIPRO TD8G66M 12BB / BIPRO TD8G60M 12BB BIPRO TD7G78M 10BB / BIPRO TD7G72M 10BB

BIPRO TP6G72M & TP6G72M(H) 9BB

BIPRO TP6G60M & TP6G60M(H) 9BB

BIPRO TD6G72M 9BB / BIPRO TD6G60M 9BB

BIPRO TD6I72M 9BB / BIPRO TD6I60M 9BB



12BB / 10BB / 9BB half-cut cell technology



Excellent Anti-PID performance



IP68 junction box



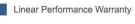
Industry leading high yield



Wider application







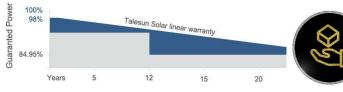




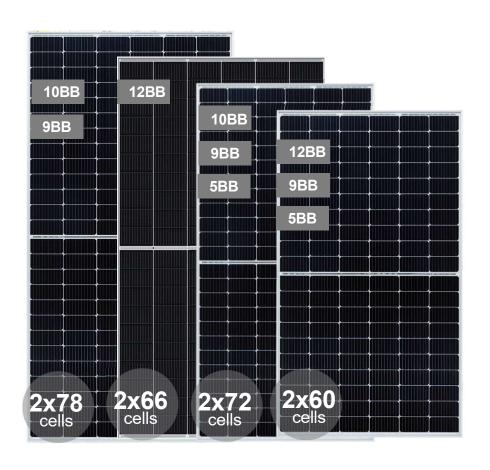








#### **BISTAR Series**



#### **Product Model**

#### 280W-665W

BISTAR TP8F66M & TP8F66M(H) 12BB / BISTAR TP8F60M & TP8F60M(H) 12BB BISTAR TP7F78M & TP7F78M(H) 10BB / BISTAR TP7F72M & TP7F72M(H) 10BB BISTAR TP6H72M & TP6H72M(H)\_full black / BISTAR TP6H72M & TP6H72M(H) black frame BISTAR TP6H72M & TP6H72M(H)

BISTAR TP6H60M & TP6H60M(H) full black / BISTAR TP6H60M & TP6H60M(H) black frame BISTAR TP6H60M & TP6H60M(H) / BISTAR TP6F78M & TP6F78M(H) 9BB BISTAR TP6F72M & TP6F72M(H) 9BB / BISTAR TP6F60M & TP6F60M(H) 9BB BISTAR TP6L72M & TP6L72M(H) 9BB / BISTAR TP6L60M & TP6L60M(H) 9BB



12BB / 10BB / 9BB half-cut cell technology



Excellent Anti-PID performance



IP68 junction box



Significantly lower the risk of hot spot



Lower LCOE





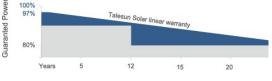














**PRODUCTS** 

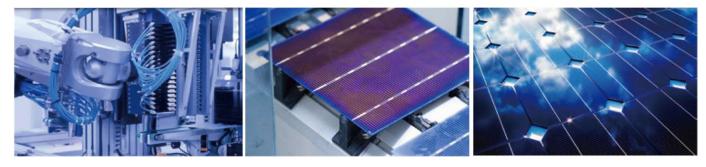


### **Manufacturing Management**

## **PV Manufacturing Capabilities**

ASI applies world-class technology and high-reliability procedures in production operations. We consistently improve employee skills and quality control to ensure the highest-quality workmanship.

We utilize fully automatic equipment from leading suppliers to maximize reliability and control the entire manufacturing process via an advanced management and control process to ensure product stability and sustainability. ASI vertically integrated production process is proven to systematically optimize costs and provide maximized value for customers.



ASI R&D facilities and constant technological innovation guarantee every ASI product's remarkable advantages and ensure that ASI products always stand out from the rest of the competition.





















































# Unprecedented Quality Standards and Assurance









#### Vertical integration enables cost-saving and reliability

With certificates of ISO 9001, ISO 14001 and OHSAS 18001, ASI applies strict quality control measures in all stages of the manufacturing process.



#### Affiliated top quality manufacturing

ASI strict quality control ensures compliance with ISO and internationally recognized quality standards such as TÜV NORD、TÜV Rheinland, etc.



#### Failure Modes and Effects Analysis (FMEA)

ASI use the FMEA process to make improvements and improve reaction speed. Every process in product manufacturing is well monitored and recorded, and every potential risk is technically mitigated by preventive analysis and measures implemented. We strive to provide a perfect product to customers with a low failure rate.



#### Highly automated

ASI employ a highly automated manufacturing process supported by the most technologically advanced equipment that mitigates environmental effects and ensures the highest-quality products.



#### **Constant innovations**

ASI strives to implement continuous innovation in technology, products, and service based on customer needs. These innovative practices have provided customers with better products and energy solutions that enable better returns on investment.





### **Continuous Innovation**

## Cutting-edge R&D Constant Innovation

ASI has been closely cooperating with accredited testing organizations and authoritative institutions in the industry. Currently, the R&D Center has established close cooperation relationship with global well-known research institutes and institutions of higher learning, including Chinese Academy of Sciences (CAS), Shanghai Jiao Tong University, Sichuan University, Energy Research Center of the Netherlands (ECN), SERIES, Southeast University, Nanjing University of Aeronautics and Astronautics.





## Experienced International R&D Team

- The international R&D team
- Outstanding teams of experienced experts
- Close cooperation with industry institutes and research organizations



## Enough Annual Revenue Invested in R&D

- R&D fund for new technology / product development
- Different R&D theme for every project
- Generous incentives for notable R&D achievements



## Patents, Creative Products, Innovative Technologies

- More than 340 patents and proprietary technologies developed
- 350+ R&D experts have published hundreds of solar papers in profess publications

MANAGEMENT CONSULTANCY



### **One-stop Solar Solutions**

## Proven Global Leading Energy Solutions Provider

ASI is dedicated to providing energy solutions to customers worldwide. With its approach to maximizing energy output and reducing the levelized cost of electricity (LCOE) by integrating all of our technology roadmaps and activities throughout whole lifecycle of the power plant, ASI has been delivering leading reliable, dependable, and cost-effective solar power plants to partners around the world.

For project developers, commercial and industrial users, utilities, independent power producers, worldwide energy off takers and investors, we confidently believe that ASI energy solutions are your smart choice.



Project Development



Engineering Design



Project Supply Chain



Engineering Construction



Operation and Maintenance







## **An Experienced Partner Knows What You Need**

With comprehensive know-how and rich experience, ASI has developed a reasonable development process to ensure that every PV project is commenced and completed as scheduled.

#### Reliable Track Record

- 7.5 GW PV project development experience
- · Global sales and project development network

#### Flexible and Professional Project Development

- Localized profession project development team in Europe and Southeast region
- High-efficiency management based on substantial experience in project development
- Flexible development models including project planning, independent development and cooperative development

#### High-quality Project Pipeline

- Close partnership with leading developers around the world
- High-quality project development team and rich project pipeline





### **Excellent Project Engineering Design Capabilities**

## **Excellent Engineering Design Capabilities**

#### **Rigorous Standards and Tailor-made Services**

- High standards are implemented throughout the project engineering design to ensure project quality
- Project layout design is based on actual solar radiation, weather and site conditions, and other factors
- Tailor-made solar energy solutions based on the project characteristics
- The most optimized engineering design based on demands of customers

#### **Professional Engineering Design and High-efficiency Team**

- · ASI adopts industry-leading PV project design tools
- ASI provides customers with best solar energy solutions based on data from professional platforms
- · Respond quickly and make adjustments timely through teamwork



Experienced Engineering Team



Rich Solution Package



Professional Industrial Standards



Leading System Design





## **Perfect Supply Chain System**

ASI has a strict supplier management system and a complete qualified supplier base. Under the premise of ensuring the quality of PV plants, ASI has long-term strategic partnerships with domestic fist-tier suppliers such as Huawei, ZHONGHUAN, TONGWEI, Far East Etc., with good quality assurance and reliable after-sales services. ASI conducts a comprehensive assessment of qualified supplier quarterly, forming a healthy cooperation with the supplier and win together while reducing costs and increasing efficiency, constantly introducing new materials to help company win opportunities in fierce market competition.

#### **Global Procurement System**

- Centralized procurement, unified management
- ASI has established partnerships with well-known equipment suppliers to ensure supply stability and cost optimization

#### **Complementary of Advantages**

- In collaboration with supplier partners, ASI keeps optimizing performance ratio of PV projects
- ASI works with its key suppliers to jointly develop innovative products and solutions







### **High-efficiency Construction Management**

## Rich Experience of PV Project Construction

ASI has an experienced construction management team with EPC qualification for power engineering. By improving project construction management process, ASI has been building PV projects efficiently, and optimizing construction costs and LCOE.



#### **Strict Execution Plan & Management**

- With efficient team management, every ASI's PV project is completed on time
- Accelerate installation and reduce labor costs by improving the construction process
- Maximize power output across the whole lifecycle of PV projects

#### **Professional and experienced Team**

- Rich PV project construction management experience, and know-how of PV industry
- World-class PV project construction capabilities and top-level project operation management team





### **Smart O&M Management**

## **Energy Internet System**

O&M is one of the key factors affecting the expected revenue of solar power station. ASI has been maximizing the investment returns of customers and investors through continuous O&M optimization.





GW-level Power Station Data Monitoring and Management System



Comprehensive Evaluation System Supporting Massive Data Analysis



Full Database System
Designed for Key
Equipment Performance
Parameters



Optimized Distributed Architecture System



The Most Reliable Efficiency Sorting and Optimization System

> MANAGEMENT CONSULTANCY





20GW+ Solar Power Plants Completed



































### **Contact Us**



Please contact us to discuss your specific clean energy solution requirements

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