

# *Astronergy's commitment to a greener world*



**ASTRONERGY**

5th December 2023





# ABOUT ASTRONERGY



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- As a **Top 6 PV module supplier** at global shipment volume, Astronergy has huge plans to expand its manufacturing capacity, product coverage while keep supply chain transparency and lower carbon emissions across the entire value chain of a PV module.
- As a company we shoulder great social responsibilities. Astronergy insists on its green energy core, and to keep developing in **much more friendly way for greener world**.
- The commitment to create a sustainable and net-zero carbon world is the primal force of Astronergy to dive into the PV industry for developing better tech of great performance, and to expand **high-reliability products to each tiny corners of energy demands**.

**3.02** Billion USD

Total Revenue in 2022

**TOP 6**

2023 H1 PV modules shipments among all suppliers worldwide  
11.5 GW total shipments in 2023 H1.

**Year-over-year increase 100%  
of shipment volume**

**55** GW

2023 PV Modules  
Production Capacity  
Worldwide

**53** GW

2023 PV cells  
Production Capacity  
Worldwide

**Year-over-year increase 100%  
of production capacity**

# GLOBAL PRESENCE



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## To be the Benchmark of Intelligent Manufacturing in the Industry

**60 GW+**  
Total Global Shipments

**140+**  
Countries



Global Headquarters



Global Sales Offices



Global Sales Channels



Global R&D Center



Global Manufacturing Bases  
(mass production)



Global Manufacturing Bases  
(under construction)



Haining, HQ  
R&D, MFG Center



Manufacturing Base  
In Yancheng



Manufacturing Base  
In Jiuquan



Manufacturing Base  
in Thailand

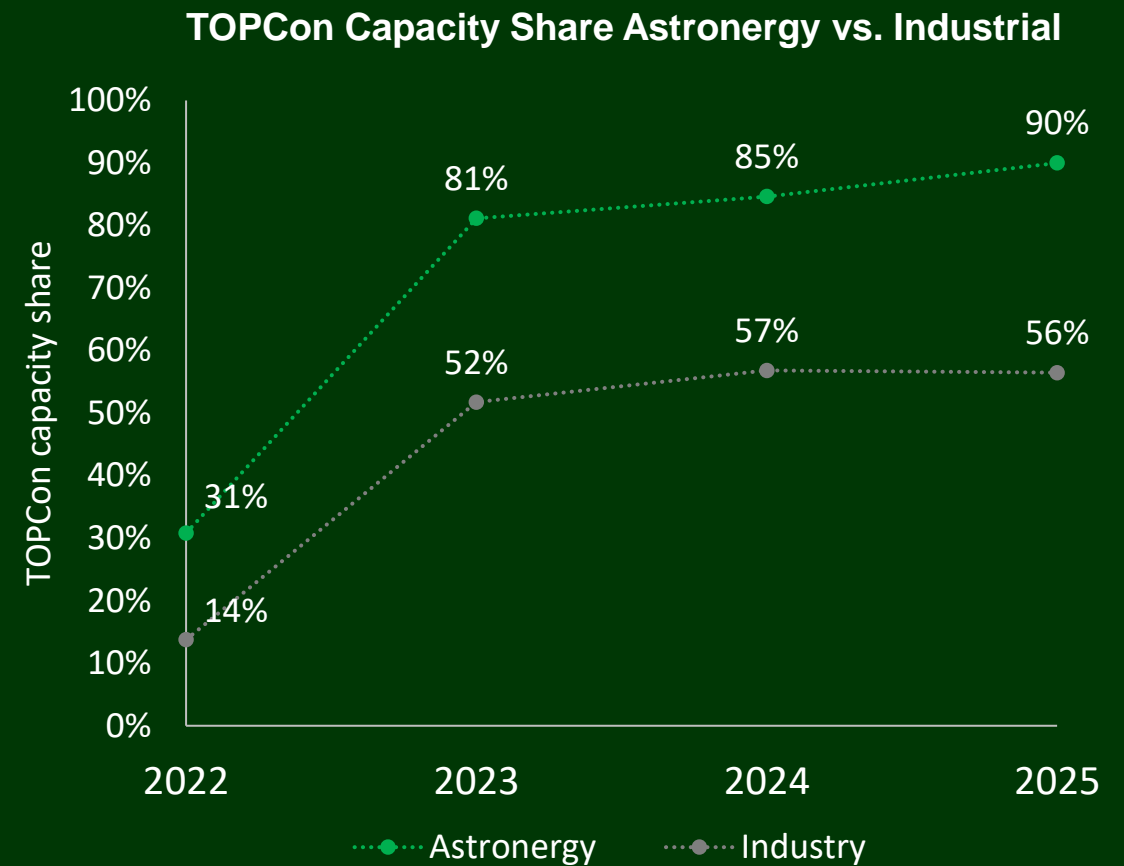
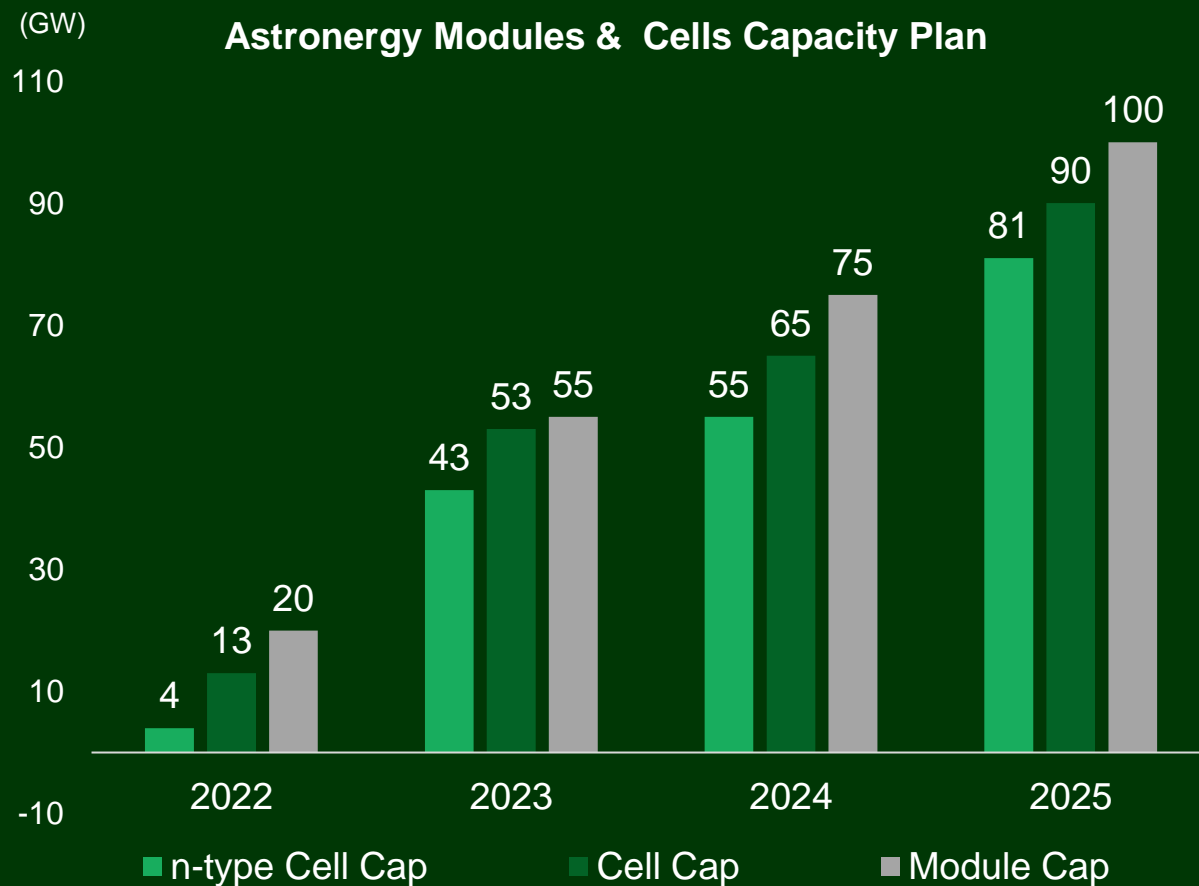
# CAPACITY PLANNING



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Astronergy's TOPCon cell production capacity will increase to **43GW** in 2023.

In 2025, the **TOPCon capacity share of Astronergy will be  $\geq 90\%$**  vs. **industry  $\leq 60\%$** .



# BRAND STRATEGY



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Green & Low-carbon

High Quality & High Reliability

Steady Development

Social Responsibility

Customer Demands

Green supply chain;  
Zero-carbon factory;  
Lower carbon footprint;  
Carbon reduction

Product reliability; Product quality control system;  
Authoritative third-party testing

Financial soundness;  
Global shipment volume;  
Better performance in bankability

ESG concept;  
ESG information disclosure;  
Employer brand building

Green

Reliability

Bankability

Compliance

Astronergy & Customers

Astronergy - ace in solar tech. We know the better way to share the sunlight with the world.

Slogan

For A Greener World

## 1) Establish the First level organization **ESG office**

- Setting up an independent team to build ESG services



## 3) Set up Overseas Production **Capacity Management Department**

- Southeast Asia
- Europe
- Middle East
- North America
- South America



## 5) **Green Supply Chain**

- Supply Chain Management Technology
- Green Manufacturing Theory
- Establish a resource-saving and environment-friendly system including procurement, production, marketing, recycling and logistics



## 2) **Zero Manufacturing Carbon Factory**

- Astronergy obtained the Yancheng factory
- successfully zero carbon plant certification certificate by TÜV Rheinland on June 13, 2023
- The target is to build 8 zero carbon factories by 2028

## 4) **The Traceability/ Social Accountability**

- STS traceability
- SA8000: Social Accountability
- ECOVADIS: Sustainability
- ISO 37001: Anti-bribery management systems



## 6) **Green Product**

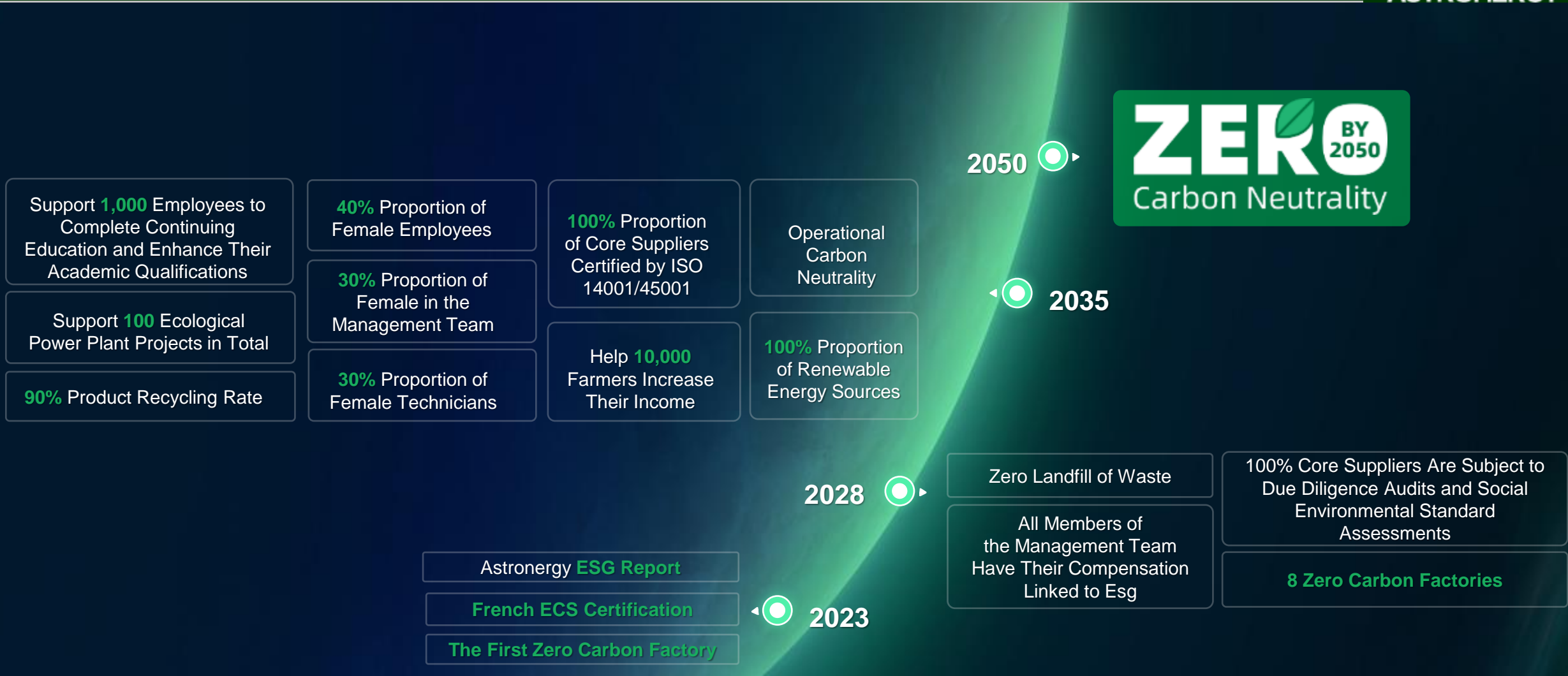
- Improve Green Product Design and Recycling Systems
- 2023/08/30
- DG module production power reach 580W
- 2023/12/15
- French ECS PPE2  $\leq 450$  kg eq CO<sub>2</sub>/kWp
- 2023/12/31



# SUSTAINABILITY ROADMAP



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# MILESTONES IN ZERO CARBON FACTORIES



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Rooftop PV (Photovoltaic) Power Station



Water-Saving Fixtures

PV (Photovoltaic) Carport



Green Building Materials

The Birth of the First Zero Carbon Factory

PV (Photovoltaic) Street Light



Green Energy Certificate

Energy-Saving Lighting System



Energy and Carbon Emission Intelligent Management System



# ACHIEVEMENTS OF THE ZERO CARBON FACTORY



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## Evaluation Level of the Zero Carbon Factory - Type I Three Stars

**Factory Name:** CHINT New Energy (Yancheng) Co., Ltd.

**Report Period:** July 1, 2022 ~ December 31, 2022

**Reported Greenhouse Gas Emissions:** 64,511.35 tCO<sub>2</sub>e

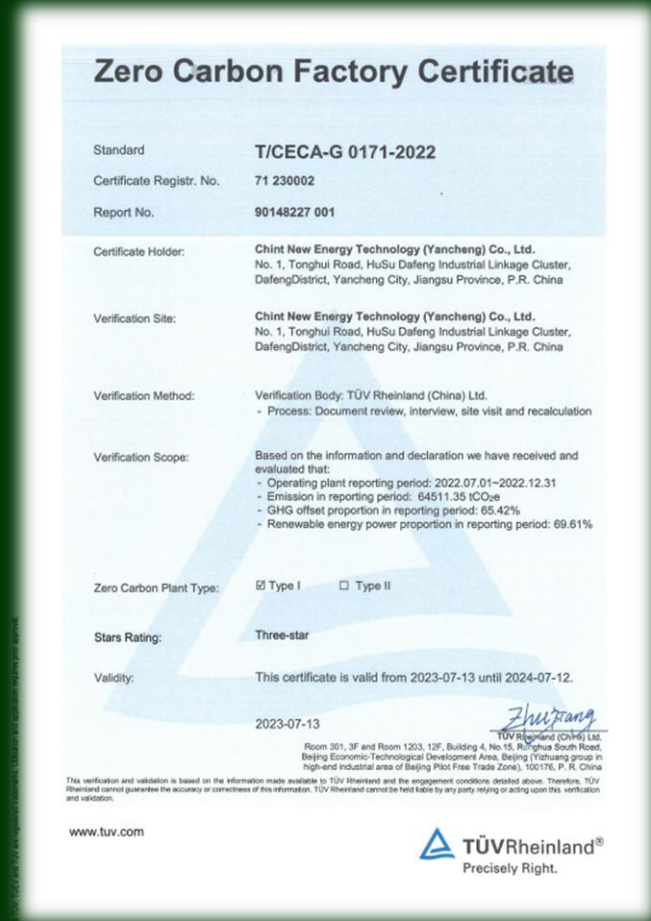
**Reported Greenhouse Gas Offset Percentage:** 65.42%

**Reported Renewable Energy Electricity Percentage:** 69.61%

**Verifier:** TÜV Rheinland Testing & Certification Service (China) Co., Ltd.

As a new energy company closely associated with low-carbon transition, Astronergy drives production with a green approach and actively promotes low-carbon transformation and zero-carbon factory certification across all our facilities.

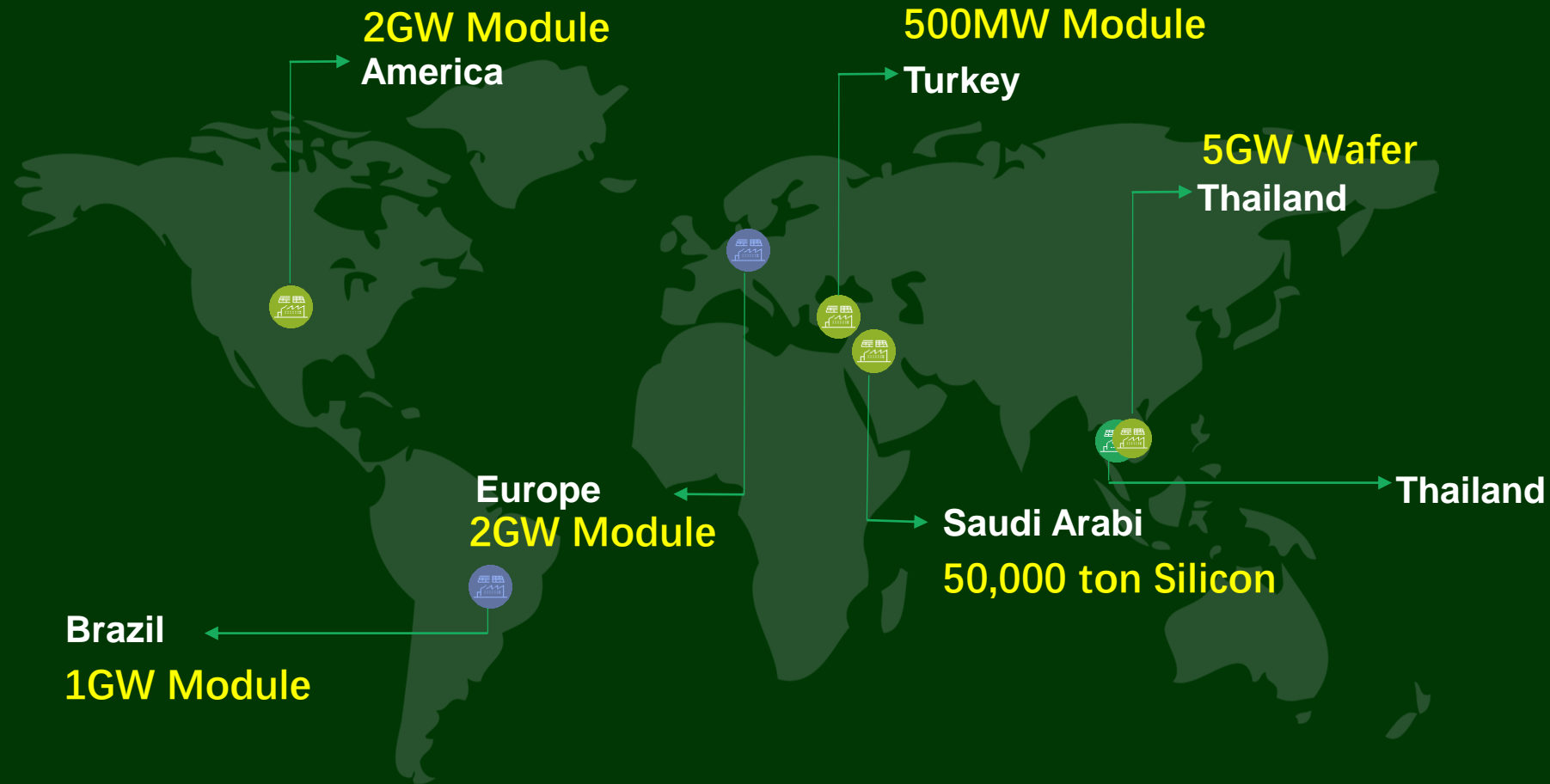
**Our goal is to complete the construction of at least 3 zero carbon factories by 2024 and achieve a total of 8 zero carbon factories by 2028.** Through concrete actions, we are dedicated to protecting our green planet.



# OVERSEAS PRESENCE



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Manufacturing Base in Thailand

- Global Manufacturing Bases (mass production)
- Global Manufacturing Bases (Preparing for construction)
- Global Manufacturing Bases (under evaluation)

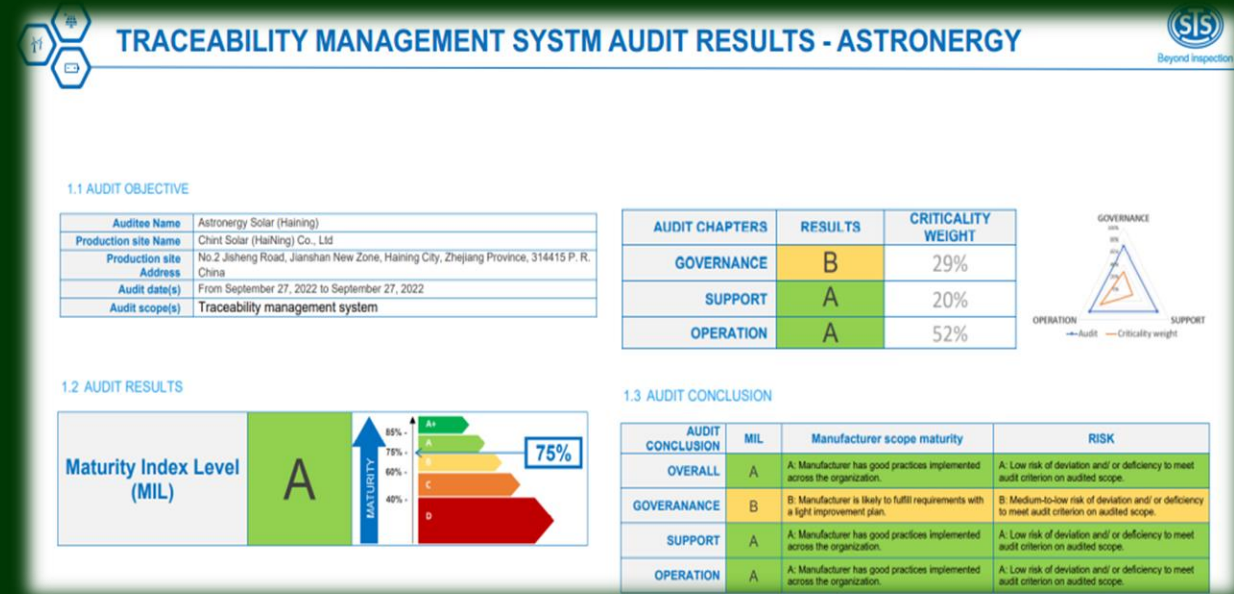
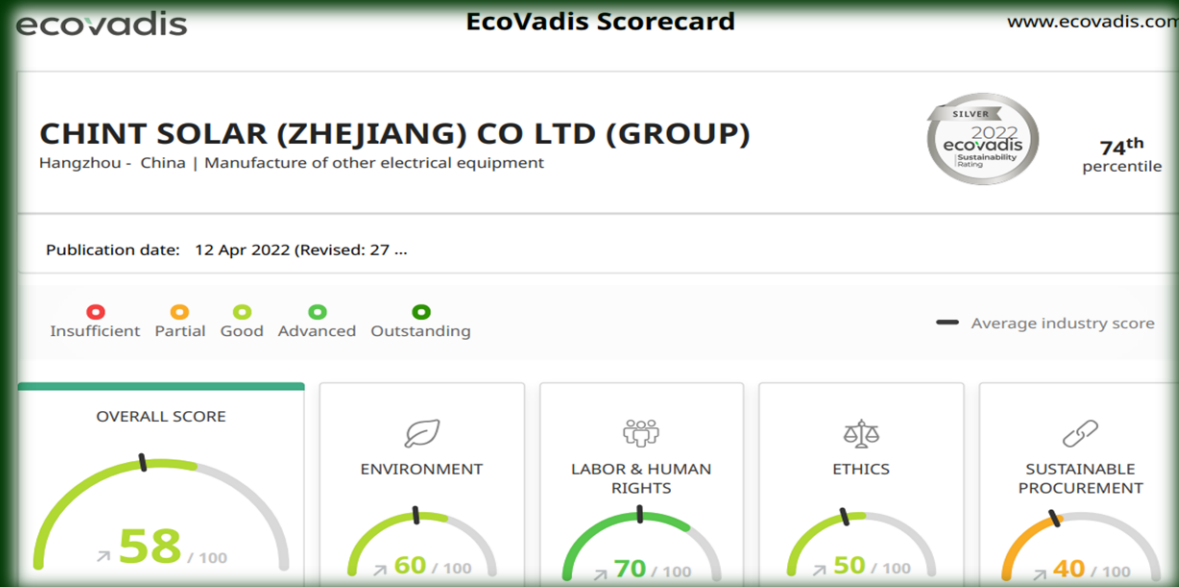
# SUSTAINABILITY



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□ ECOVADIS: sustainability rating SILVER

□ STS : Traceability management system audit







## □ SA8000: Social Accountability



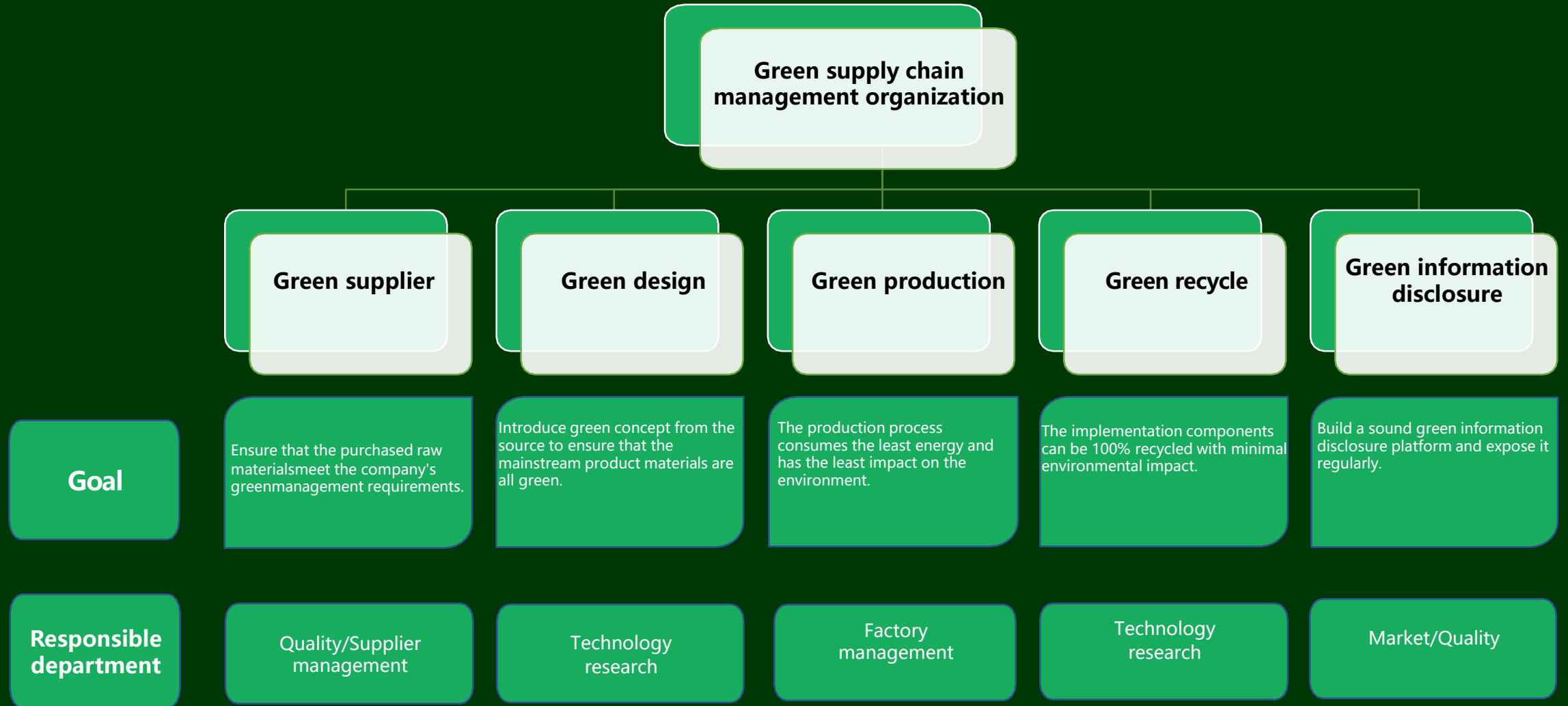
## □ ISO 37001: Anti-bribery management systems (in progress)



# GREEN SCM IMPLEMENTATION STRATEGY



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# Low Carbon-emission Certificates



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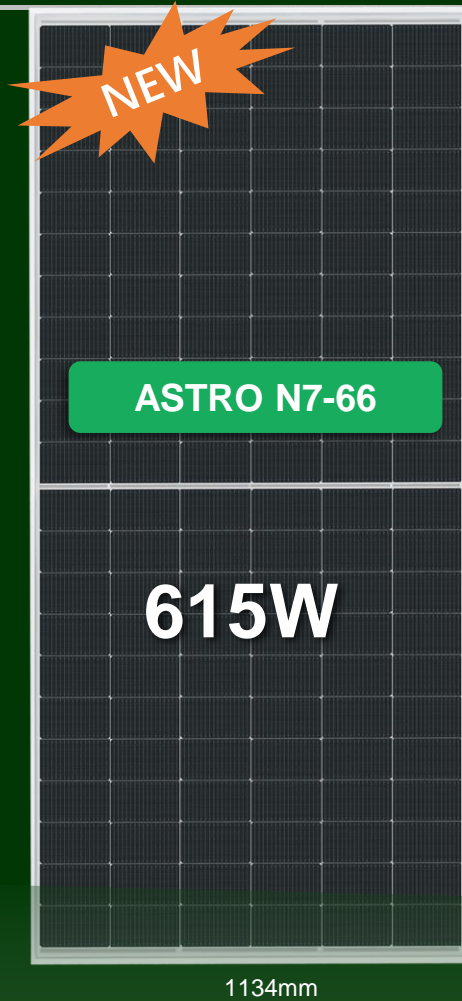




# Main Products — ASTRO N-Series



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*High Quality, High Performance, High Efficiency*

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