Solar.
Standards.
Sustainability

BEING A
TRUSTED GLOBAL NEW ENERGY
SOLUTION PROVIDER

V.202508

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CHAIRMAN'S MESSAGE

The Standard We Believe In

In today's rapidly evolving solar industry, only those who uphold true standards can move forward with confidence.

At Standard Energy, the"standard"we believe in is more than a name—it's a responsibility. It means precision in manufacturing, transparency in cooperation, and commitment to every project we undertake. With integrated production, from ingots to wafers, cells, frames, and modules, we are not just part of the supply chain,we are building the foundation for reliable solar solutions worldwide.

As we pursue our vision of "being a trusted global new energy solution provider", we recognize both the challenges and the opportunities ahead. The industry is navigating intensifying competition and shifting global dynamics,but also accelerating demand for clean, independent, and accessible energy.

That's why partners around the world choose to work with us,not simply as a supplier, but as a trusted collaborator who empowers their success through tailored manufacturing support and long-term value.

We will continue to uphold this standard with rigor and responsibility, and work hand in hand with our partners to power a more sustainable world.

Chairman: Yang Wang

CONTENTS

STDARD

Strategic Vision

01

ABOUT US

Standard Energy, founded in 2019 and headquartered in Singapore, is committed to being a trusted global new energy solution provider. With a focus on both PV material manufacturing and PV system services, Standard Energy aims to develop sustainable clean energy ecosystems worldwide.

Standard Energy maintains a global strategy with a "1+N" model, one headquarters in Singapore, with N bases covering the United States, India, Mexico, Indonesia, Laos, and the Philippines. In 2025, Standard Energy's total production capacity has reached 26.5 GW.

Standard Energy's PV material manufacturing business primarily focuses on the production and processing of silicon materials, including ingots, wafers, and cells, as well as the production of metal materials, specifically aluminum frames. The PV system services encompass the R&D, production, and sales of solar modules for residential, commercial, and utility-scale applications, catering to global markets including North America, Europe, the Asia-Pacific region, and Africa.

ABOUT US

Experience In the Field of PV Power Generation

6 Year+

Total Production Capacity (Projected to 2025)

26.5 GW+/yr

Global Top 500 New Energy Enterprises

TOP 500

Manufacturing Bases

6 Major

Global Staff

1500+

Patents No.

15

STRATEGIC PATH

1.0 2019-2022

Focus on Photovoltaic Materials Trading, establishing STDARD as a leading material supplier globally.

2.0 2023-2026

Focus on Photovoltaic System Solutions, expanding into system design, manufacturing, and integration.

3.0 Future

Focus on Clean Energy Supply Chain Integration, becoming a Comprehensive solutions provider.

MILESTONE

2022-2023

- "Foreign Investment Outstanding Contribution" Award (for Two Consecutive Years)
- Service center established in the United States

2024

Production Bases Progress

- Factories in Indonesia, Laos and the Philippines began construction

Service Centers Progress

- Service centers established in India and Mexico

Group Honors

- Ranked among the Top 500 Global New Energy Enterprises
- "PV Industry Innovative Module Enterprise" Award
- "Overall Highest Achiever" (by the Renewable Energy Testing Center (RETC), USA)
- "Compassion Enterprise" Award
- Became a member of the SEIA (Solar Energy Industries Association)

2025

- The factory in the United States began construction
- The silicon materials factory in Indonesia and the module factory in the Philippineshas commenced production

- Global Presence
- Industrial Cluster
- Capacity Layout
- Quality Assurance

Global Leadership

02

GLOBAL PRESENCE

Headquarter

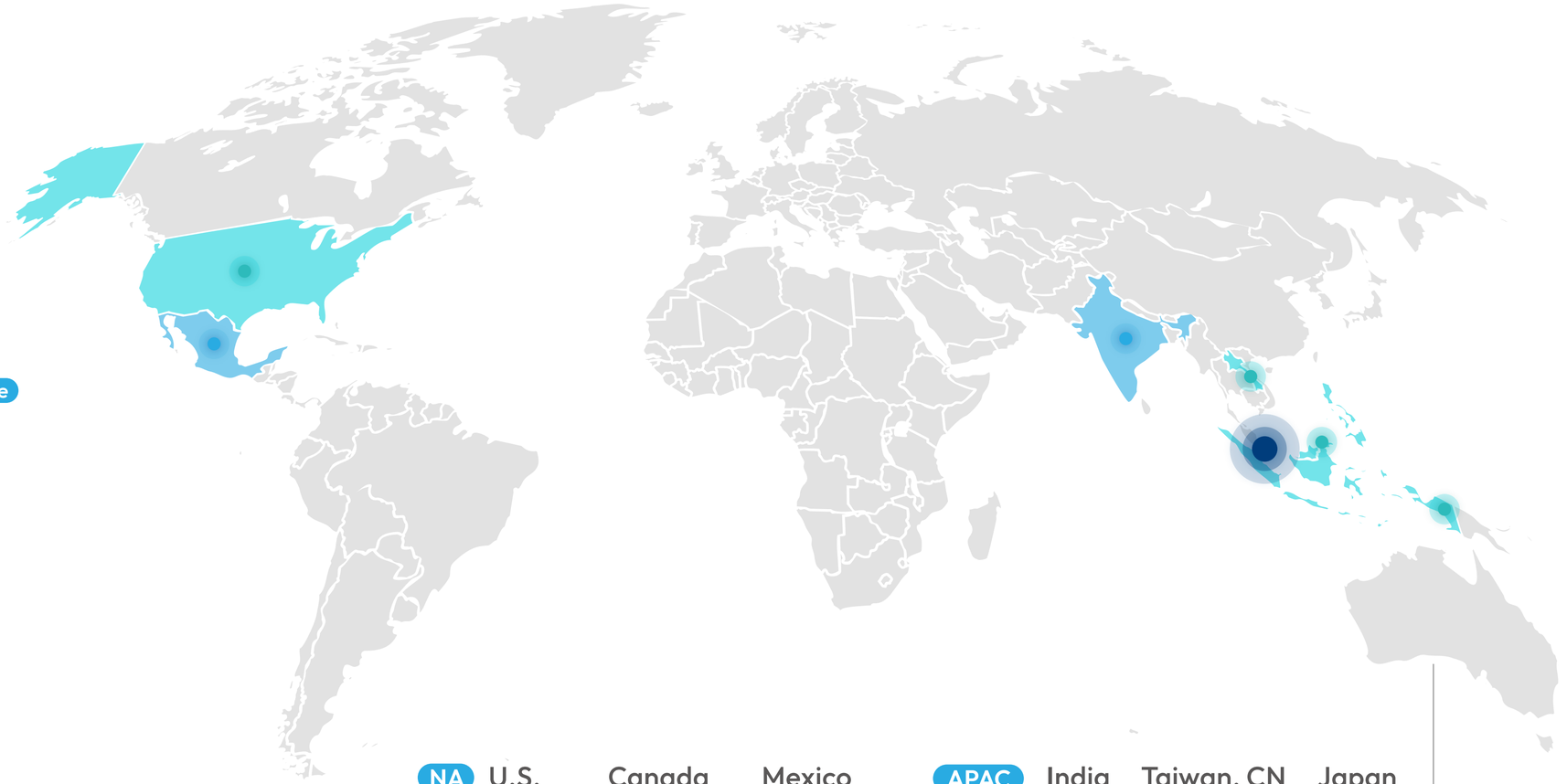
Singapore

Production Base

U.S.	PV Module, Aluminium Profile
Indonesia	Silicon Ingot, Silicon Wafer
Laos	Aluminium Profile
Philippines	PV Cell, PV Module

Service Center

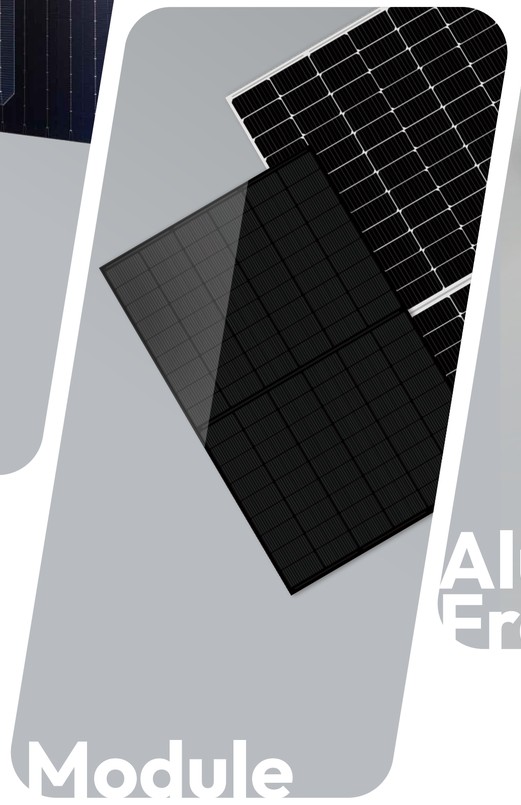
U.S.
India
Mexico



Market

NA	U.S.	Canada	Mexico	APAC	India	Taiwan, CN	Japan
EU	Spain	Germany	Italy	MENA	UAE	North Africa	
	UK	France	Poland				

INDUSTRIAL CLUSTER



Comprehensive Production Process

Traceability System

CAPACITY LAYOUT

Integrated PV Supply Chain

INGOT	WAFER	ALUMINUM PROFILE	PV MODULE	PV CELL	PV MODULE	ALUMINUM PROFILE
3 GW	3 GW	10 GW	3 GW	1.5 GW	1 GW	5 GW

QUALITY ASSURANCE

Product Quality

- High-quality solar products with rigorous testing
- Strict quality control (IQC, IPQC, FQC, OQC) to ensure consistency

Warranty

25 Year

Product warranty

30 Year

Linear power warranty for long-term performance and energy output

Industry Recognition

2024 RETC
"Overall Highest Achiever"

Global Top 500
New Energy Enterprises

Member of SEIA
(Solar Energy Industries Association)

Dun & Bradstreet
Registered

Certifications

Key Certifications

ISO9001	Quality Management Systems
ISO14001	Environmental Management Systems
ISO45001	Occupational Health and Safety Management Systems

Global Certifications

UNITED STATES PATENT AND TRADEMARK OFFICE

EUIPO EUROPEAN UNION INTELLECTUAL PROPERTY OFFICE

- Silicon Rod & Ingot
- Silicon Wafer
- Solar Cell
- Aluminum Profile
- PV Module
- Customized Solutions

Advanced Technologies

03

SILICON ROD & INGOT

Location Advantage

Made in Indonesia

With certificates of origin for full traceability

Raw Material Advantage

Sourced from top suppliers Hemlock (USA)

Ensuring quality and traceability

Manufacturing Advantage

Full-process MES system supporting traceability

Customizable N-type and P-type

sizes from 182 to 210mm

SILICON WAFER

From U.S. Polysilicon to Indonesia Wafers

Reliable upstream, efficient downstream — built for trust and quality.

Fast Lead Time

Automatic production and agile logistics for quick delivery

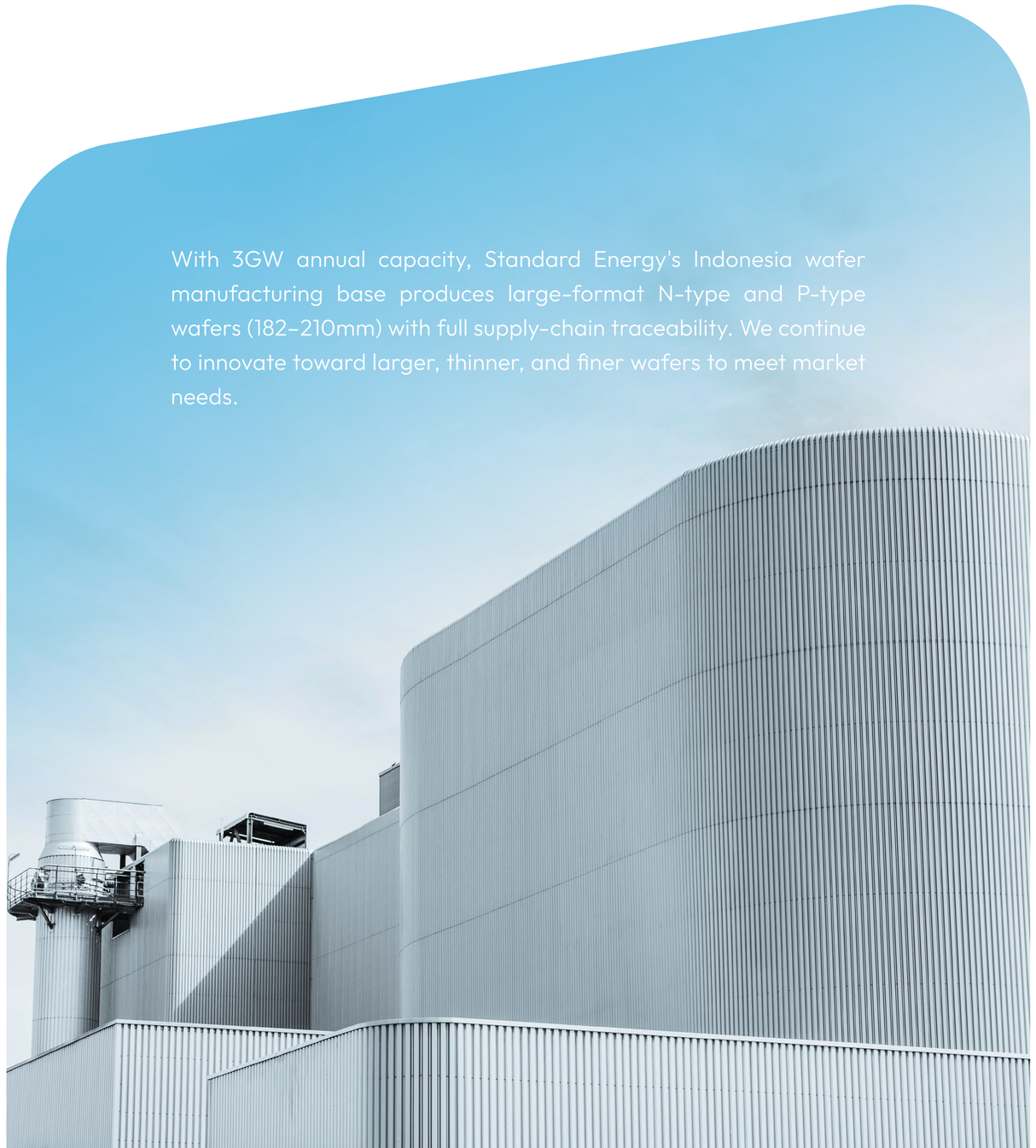
MES-Controlled Production

Real-time monitoring and traceability from ingot to wafer

Low Breakage Rate

Optimized slicing yields for reduced wafer loss and higher cell output

With 3GW annual capacity, Standard Energy's Indonesia wafer manufacturing base produces large-format N-type and P-type wafers (182–210mm) with full supply-chain traceability. We continue to innovate toward larger, thinner, and finer wafers to meet market needs.



SOLAR CELL

The solar cell factory in the Philippines has an annual capacity of 1.5GW, focusing on N-type cells across mainstream sizes. Equipped with advanced automationand intelligent systems, it ensures scalable, digital, and high-efficiency manufacturing. With full traceability andstrict quality control, each cell delivers reliable performance, with average efficiency up to 25.2%.

STDARD Cell Size

182 183 210R 210

ALUMINUM PROFILE

Capacity

10 GW

Standard Energy's aluminum profile manufacturing bases, located in the United States and Laos, have an annual capacity of approximately 50,000 tons of aluminum frames, supporting the production of 10GW of photovoltaic modules each year.

Rapid Sample Delivery

Samples are delivered within 15 working days, accelerating client's testing

High-Strength Materials

Optimized compositions for strength exceeding 6005-T6 standards, designed to withstand harsh environments

Lightweight & Structurally Stable

Combines lightweight design with excellent structural stability

Step 1 Aluminum Bar Heating Furnace

Step 2 Extrusion Equipment

Step 3 Aging Furnace

Step 4 Sandblasting Machine

Step 5 Oxidation Production Line

Step 6 Deep Processing Production Lines

PV MODULE

With a production capacity of 3GW in the Philippines and 1GW in the U.S., Standard Energy is strategically positioned to meet the rising global demand for high-performance solar modules

Our modules span a wide range of technologies including P-type, N-type, high-efficiency Back Contact(BC),and HT (Heterojunction). We offer a broad selection of power outputs from 100W to 740w, tailoredto diverse application scenarios-from residential andcommercial & industrial (C&I) to utility-scale solarprojects.

In addition to ODM partnerships, Standard Energy has established its own brand, Gstar, and operates through direct-to-consumer channels such as Amazon.

PERC Module

- Long-term reliability
- Improved low-light performance
- Performance-durability-cost harmony

N-Type Module

- Better mechanical loading tolerance
- Low LID/LETID attenuation
- Excellent Anti-PID performance
- No water-permeability and high wear-resistance

High Efficient Module

- N-type HJT/BC technology applied
- High conversion efficiency
- Excellent bifacial performance
- Wider application for diverse weather conditions

CUSTOMIZED SOLUTIONS

STDARD offers flexible OEM and ODM solutions, providing customized solar products tailored to meet clients' specific needs. With a global reach, we deliver bespoke solutions that comply with international standards, empowering businesses to create unique solar products aligned with their market and technical requirements.

Ingot

Customer Supplied Silicon

Wafer

Customer Supplied Ingot

Solar Cell

Customer Supplied Wafer

Aluminum Frame

Customer Supplied Drawing

PV Module

- Reliable Service Assurance
- Project Reference

Proven Excellence

04

RELIABLE SERVICE ASSURANCE

Real-time demand forecasting

Cross-department resource alignment

Minimized vertical production delays

Automated global order tracking

Centralized inventory control

Milestone visibility across facilities

AI-powered bottleneck prediction

IoT-enabled dynamic scheduling

Guaranteed on-time delivery

PROJECT REFERENCE

STDARD's high-performance solar modules have been installed on thousands of rooftops, earning widespread praise for their reliability and efficiency. Our solutions continue to provide long-term value to homeowners, businesses, and large-scale utility projects, driving the global transition to clean, renewable energy.

RESPONSIBILITY

Environment

Promoting green manufacturing and the use of clean energy to reduce environmental impact and support sustainable development

Social

Investing in team building, community engagement, and educational support to foster inclusive growth and social well-being.

Governance

Ensuring transparent operations and a robust compliance system to uphold integrity and long-term accountability.

STDARD

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