



SOUTHEAST ASIA

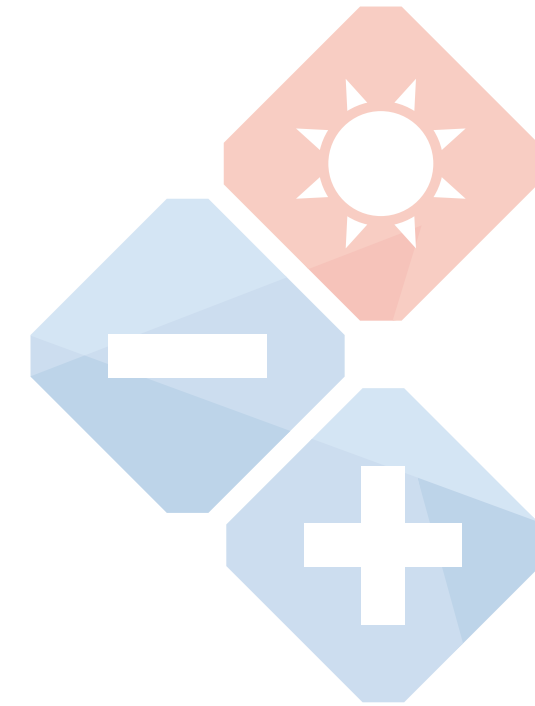
SOLAR SUPPLY CHAIN MAP

Edition 1 - 2025



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ABOUT US

Since 2009, Sinovoltaics, a Dutch-German solar PV and BESS technical compliance and quality assurance service firm has been a pioneer in the solar photovoltaic and BESS industries.

With our AI-based SELMA software and industry leading Zero Risk Solar® guarantee, our mission is to eliminate all PV & BESS product defects, enabling investors and the world to succeed with minimal investment risks.

We have inspection teams located in Mainland China, Vietnam, Thailand, India, Türkiye, and the United States. They are ready to visit your supplier factory.

INTRODUCTION

Sinovoltaics Solar Supply Chain Maps

Dive into the heart of the solar industry, exploring the latest maps showcasing existing and future solar module manufacturers alongside their critical suppliers in solar cells, wafers, ingots, and polysilicon.

Key Features:

- **Region-Specific Maps:** Tailored for each thriving solar market - North America, Europe, Southeast Asia, and India.
- **Manufacturer Directory:** Access up-to-date information on solar manufacturers operating in each region. Stay ahead of the curve by understanding the key players in each market.
- **Expansion Tracking:** Stay informed on industry growth with real-time updates on which manufacturers are currently building new facilities.
- **Comprehensive Updates:** Our dedicated team ensures that the solar supply chain maps are refreshed every 4 months, offering the latest information on evolving market dynamics.

Sinovoltaics' Solar Supply Chain Maps empower you with the knowledge needed to navigate the global solar landscape effectively. Download the latest maps now and stay ahead in the race to harness the potential of solar energy.





June 2025

Southeast Asia Solar Supply Chain Map - Edition 1 (2025)

The first 2025 edition of the Southeast Asia Solar Supply Chain Map includes significant revisions and additions, driven by valuable market feedback and the region's evolving geopolitical and industrial dynamics.

- Thanks to new data, this edition includes entries such as **ICA Solar** and **United Renewable Energy (URE)**, reflecting the evolving landscape of PV manufacturing in the region.
- Despite strong ambitions, **PV module manufacturing in Southeast Asian is currently under pressure**. Operational capacities have been **significantly reduced or temporarily halted**, primarily due to **U.S. import tariffs**. Once a strategic workaround for Chinese manufacturers aiming to access Western markets, Southeast Asia now faces growing constraints. In response, some producers are **redirecting exports toward Europe**.
- While **Cambodia, Vietnam, and Thailand** were once key manufacturing hubs, there is now a **clear shift toward Laos and Indonesia**, which **are currently not subject to U.S. tariffs**. Some firms are also exploring the **Middle East** as a manufacturing alternative. In response to these developments, Sinovoltaics will soon release a **Middle East Solar Supply Chain Map** to help stakeholders navigate these emerging changes. However, the long-term outlook for manufacturing growth in Southeast Asia remains uncertain.



- Despite these headwinds, the region's **growth ambitions remain strong**:
 - **Nameplate PV module capacity** currently stands at **86 GW** with a target of reaching **101 GW by 2028 or 2030**
 - **Cell capacity** is projected to rise from **51.3 GW** to **69.8 GW** by 2030
 - **Ingot capacity** is expected to double from **16 GW to 30 GW**
 - **Polysilicon production** aims to scale significantly, from **82,000 tonnes** to **342,000 tonnes**
 - This growth is supported by an additional **102,000 metric tonnes** of **MG-Si** (metallurgical-grade silicon).
- Meanwhile, although U.S. policy aims to boost domestic solar manufacturing, recent developments may **hinder growth potential within the United States itself**. More importantly, the ambition to build self-sufficient manufacturing chains is unlikely eliminate reliance on **Chinese wafer and cell supply** in the near term.
- This edition of the Southeast Asia Solar Supply Chain Map provides a detailed snapshot of current realities and future ambitions, as the region navigates complex trade, investment, and production challenges.

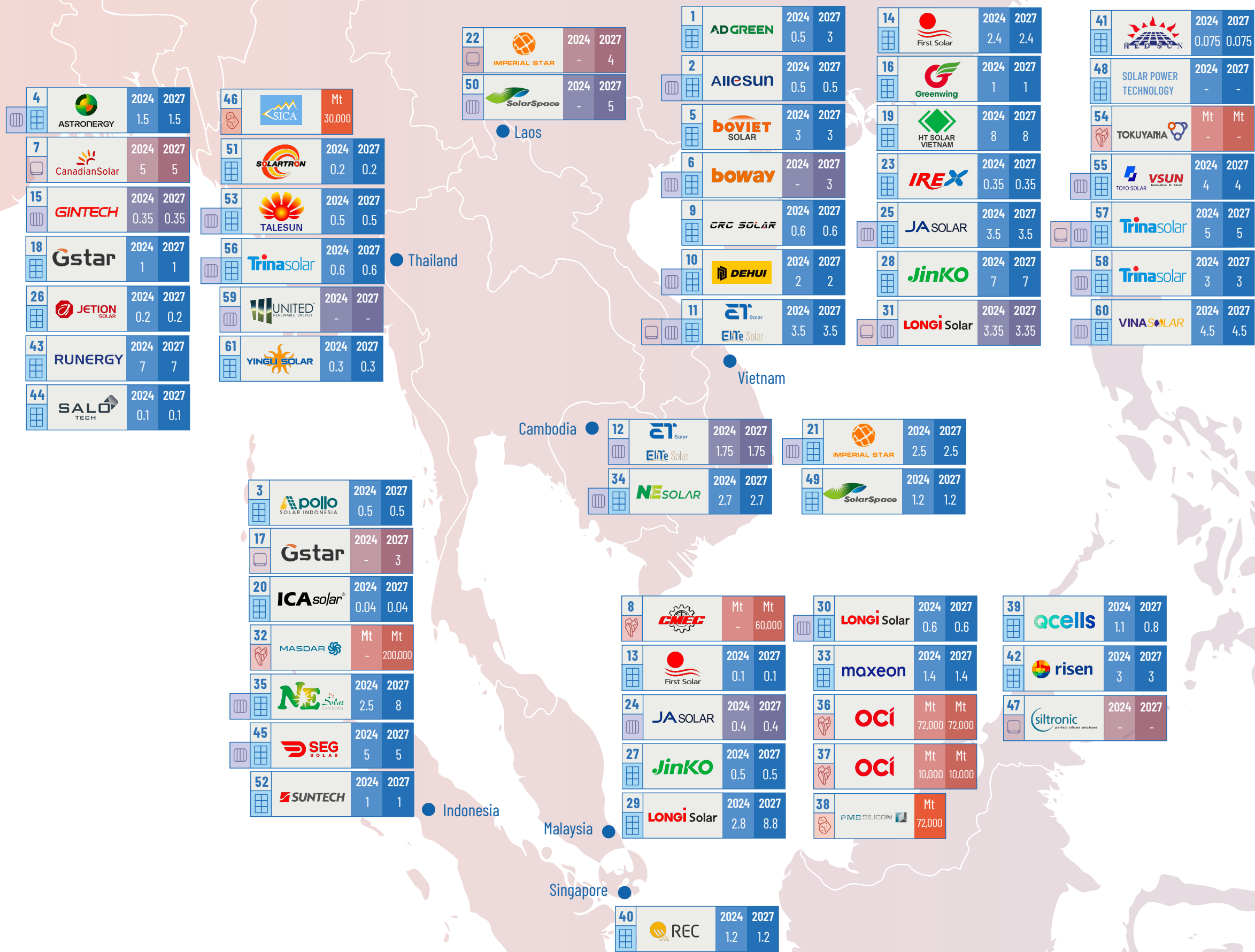
SOLAR SUPPLY CHAIN SOUTH EAST ASIA

LEGEND

Module			Module capacity (GWp)
Cell			Cell capacity (GWp)
Wafer			Wafer capacity (GWp)
Ingot			
Polysilicon			Polysilicon capacity (GWp)
MGS			MGS (Metric tonnes)

   List of factories from the same Country

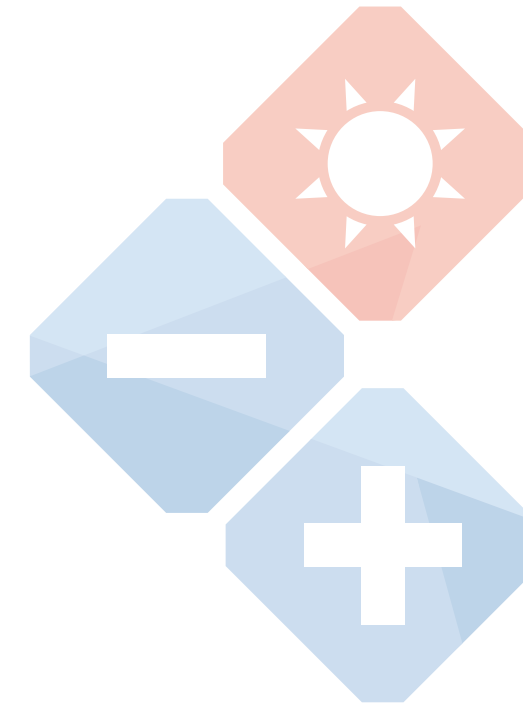
Country



No.	Company Name	State / Country	Module		Cell		Wafer		Ingot		Polysilicon		MGS	Website	Email address
			GWp		GWp		GWp		GWp		GWp		Metric Tonnes		
			2024	2027	2024	2027	2024	2027	2024	2027	2024	2027	2024		
1	AD Green	Vietnam	0.5	3	-	-	-	-	-	-	-	-	-	https://adgreen.vn/	-
2	Allesun New Energy	Vietnam	0.5	0.5	0.3	0.3	-	-	-	-	-	-	-	https://www.allesun.com/	-
3	Apollo Solar	Indonesia	0.5	0.5	-	-	-	-	-	-	-	-	-	https://apollosolarindonesia.com/	-
4	Astroenergy	Thailand	1.5	1.5	1.5	1.5	-	-	-	-	-	-	-	https://www.astronerqy.com/	-
5	Boviet Solar	Vietnam	3	3	-	-	-	-	-	-	-	-	-	https://bovietsolar.com/	-
6	BoWay Alloy	Vietnam	-	-	-	3	-	-	-	-	-	-	-	-	-
7	Canadian Solar	Thailand	-	-	-	-	5	5	-	-	-	-	-	https://www.canadiansolar.com/	-
8	CMEC	Malaysia	-	-	-	-	-	-	-	-	-	60,000	-	-	-
9	CRC Solar	Vietnam	0.6	0.6	-	-	-	-	-	-	-	-	-	-	-
10	Dehui Solar	Vietnam	2	2	1.5	1.5	-	-	-	-	-	-	-	https://www.dehui-technology.com/	-
11	ET Solar/ EliTe Solar	Vietnam	3.5	3.5	3.5	3.5	5	5	-	-	-	-	-	https://www.elite-solar.com/	-
12	ET Solar/ EliTe Solar	Cambodia	-	-	1.75	1.75	-	-	-	-	-	-	-	-	-
13	First Solar	Malaysia	0.1	0.1	2	2	-	-	-	-	-	-	-	https://firstsolar.com/	-
14	First Solar	Vietnam	2.4	2.4	-	-	-	-	-	-	-	-	-	https://firstsolar.com/	-
15	GinTech	Thailand	-	-	0.35	0.35	-	-	-	-	-	-	-	http://www.gintech.org/en/company/	-
16	Green Wing	Vietnam	1	1	-	-	-	-	-	-	-	-	-	https://greenwingsolar.com/cn/	-
17	Gstar	Indonesia	-	-	-	-	-	3	-	-	-	-	-	https://www.gstarsolar.com/about-us/	-
18	Gstar	Thailand	1	1	-	-	-	-	-	-	-	-	-	-	-
19	HT Solar	Vietnam	8	8	8	8	-	-	-	-	-	-	-	https://htsolarvn.com/about-us-all.html	-
20	ICA Solar	Indonesia	0.04	0.04	-	-	-	-	-	-	-	-	-	-	-
21	Imperial Star Solar	Cambodia	2.5	2.5	2	2	-	-	-	-	-	-	-	https://www.imperialstar.com/	-
22	Imperial Star Solar	Laos	-	-	-	-	-	4	-	-	-	-	-	https://www.imperialstar.com/	-
23	IREX Energy	Vietnam	0.35	0.35	-	-	-	-	-	-	-	-	-	https://irex.vn/en/	-
24	JA Solar	Malaysia	-	-	0.4	0.4	-	-	-	-	-	-	-	https://www.jasolar.com/html/en/	-
25	JA Solar	Vietnam	3.5	3.5	3.5	8.5	-	-	-	-	-	-	-	https://www.jasolar.com/html/en/	-

No.	Company Name	State / Country	Module		Cell		Wafer		Ingot		Polysilicon		MGS	Website	Email address
			GWp		GWp		GWp		GWp		GWp		Metric Tonnes		
			2024	2027	2024	2027	2024	2027	2024	2027	2024	2027	2024		
26	Jetion	Thailand	0.2	0.2	-	-	-	-	-	-	-	-	-	https://www.jetionsolar.com/en	-
27	Jinko	Malaysia	0.5	0.5	0.45	0.45	-	-	-	-	-	-	-	https://www.jinkosolar.com/en/	-
28	Jinko	Vietnam	7	7	-	-	-	-	-	-	-	-	-	https://www.jinkosolar.com/en/	-
29	Longi	Malaysia	2.8	8.8	-	-	-	-	-	-	-	-	-	https://www.longi.com/en/	-
30	Longi	Malaysia	0.6	0.6	0.6	0.6	-	-	-	-	-	-	-	https://www.longi.com/en/	-
31	Longi	Vietnam	-	-	3.35	3.35	-	6.5	-	-	-	-	-	https://www.longi.com/en/	-
32	Masdar	Indonesia	-	-	-	-	-	-	-	-	-	200,000	-	-	-
33	Maxeon	Malaysia	1.4	1.4	-	-	-	-	-	-	-	-	-	https://maxeon.com/	-
34	NE Solar	Cambodia	2.7	2.7	1	1	-	-	-	-	-	-	-	http://www.nesolar.com.kh/	-
35	New East Solar/ ZNShine	Indonesia	2.5	8	2.5	8	-	-	-	-	-	-	-	http://www.nesolar.com.kh/	-
36	OCI	Malaysia	-	-	-	-	-	-	-	-	72,000	72,000	-	https://www.oci.co.kr/en/products/semiconductor/polysilicon	-
37	OCI	Malaysia	-	-	-	-	-	-	-	-	10,000	10,000	-	https://www.oci.co.kr/en/products/semiconductor/polysilicon	-
38	PMB Silicon	Malaysia	-	-	-	-	-	-	-	-	-	-	72,000	https://pmbtechnology.com/index.html	-
39	QCells	Malaysia	1.1	0.8	-	-	-	-	-	-	-	-	-	https://www.q-cells.eu/en/	-
40	REC	Singapore	1.2	1.2	1.1	1.1	-	-	-	-	-	-	-	https://www.recgroup.com/en	-
41	Red Sun Energy	Vietnam	0.075	0.075	-	-	-	-	-	-	-	-	-	https://redsuns.com.vn/common/home	-
42	Risen Energy	Malaysia	3	3	-	-	-	-	-	-	-	-	-	https://en.risenenerqy.com/	-
43	Runergy	Thailand	7	7	-	-	-	-	-	-	-	-	-	-	-
44	SaloTech	Thailand	0.1	0.1	-	-	-	-	-	-	-	-	-	https://salotech.fi/en/about-us/	-
45	SEG Solar	Indonesia	5	5	3	3	-	-	-	-	-	-	-	https://www.segsolar.com/	-
46	Sica New Materials	Thailand	-	-	-	-	-	-	-	-	-	-	30,000	http://www.sica-mtl.com/index_en.html	-
47	Siltronic	Malaysia	-	-	-	-	-	-	-	-	-	-	-	https://www.siltronic.com/en/index.html	-
48	Solar Power Technology	Vietnam	-	-	-	-	-	-	-	-	-	-	-	-	-
49	Solarspace	Cambodia	1.2	1.2	-	-	-	-	-	-	-	-	-	https://www.solarspace.cn/	-
50	Solarspace	Laos	-	-	-	5	-	-	-	-	-	-	-	https://www.solarspace.cn/	-

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ARE YOU A SOLAR MANUFACTURER?

In our next edition of the Southeast Asia Solar Supply Chain Map, we aim at listing how procurement stakeholders can contact each factory.

Do not hesitate to reach out at contact@sinovoltaics.com so we can list your contact details.

Also, if your solar manufacturing project is not listed or has been updated, please contact us and share your latest ambitions. We will include it in our next release.

SOURCES

The report presents data compiled from various sources, including publications, market reports, manufacturer press releases, and Sinovoltaics' direct relationships with manufacturers. We extend our gratitude to these valuable data contributors.

PV Magazine New Releases

PV Tech News Releases

LinkedIn Posts

Company Websites

<https://www.ensolar.com/directory/panel/monocrystalline?country=187>

https://www.solarfeeds.com/?catid=60&country=United%20Kingdom&supplied_project=Austria&capacity=52

Call with manufacturers

[https://finance.yahoo.com/news/16-largest-silicon-producers-world-212541541.html?](https://finance.yahoo.com/news/16-largest-silicon-producers-world-212541541.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLnNvbS8&guce_referrer_sig=AQAAAJhloJ-eDhOMkkSZ6fuAX6Xt7Xs0LSLx84lsCJmupl_mfZsHGHcFXByXISwR2-R4T9CG65hibs9X8vGuZfCwKGtiJFQltqfdsgGySw75TTdtloCfXBE2hoEB24mwVlyP4Cd_1y_AGbLV2Bv61NvfkEgujZKTN9X3tgk17DgSRP-w)

[guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLnNvbS8&guce_referrer_sig=AQAAAJhloJ-eDhOMkkSZ6fuAX6Xt7Xs0LSLx84lsCJmupl_mfZsHGHcFXByXISwR2-R4T9CG65hibs9X8vGuZfCwKGtiJFQltqfdsgGySw75TTdtloCfXBE2hoEB24mwVlyP4Cd_1y_AGbLV2Bv61NvfkEgujZKTN9X3tgk17DgSRP-w](https://finance.yahoo.com/news/16-largest-silicon-producers-world-212541541.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLnNvbS8&guce_referrer_sig=AQAAAJhloJ-eDhOMkkSZ6fuAX6Xt7Xs0LSLx84lsCJmupl_mfZsHGHcFXByXISwR2-R4T9CG65hibs9X8vGuZfCwKGtiJFQltqfdsgGySw75TTdtloCfXBE2hoEB24mwVlyP4Cd_1y_AGbLV2Bv61NvfkEgujZKTN9X3tgk17DgSRP-w)

<https://www.linkedin.com/pulse/metallurgical-grade-silicon-metal-market-5qbzf/>

<https://www.ensolar.com/directory/material/cell?country=102>

<https://www.linkedin.com/pulse/polysilicon-indias-production-potential-solar-module-manufacturing/>

<https://www.seetao.com/details/209542.html>





ELIMINATE RISKS AND GUARANTEE PROJECT ROI

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