

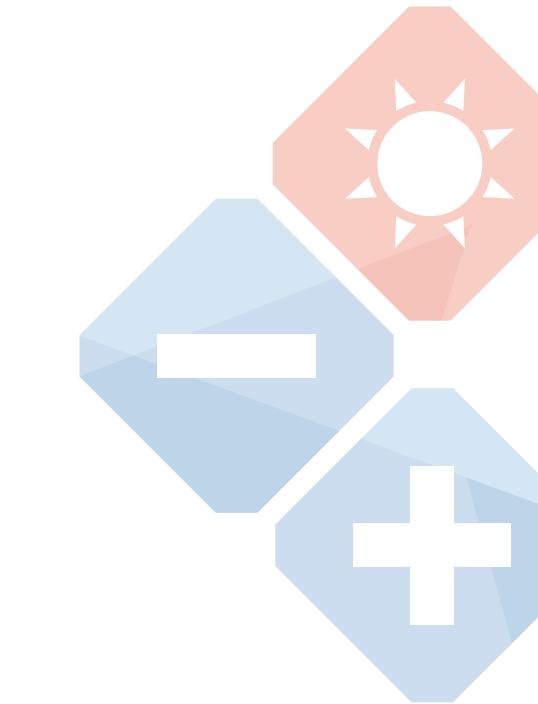


NORTH AMERICA SOLAR SUPPLY CHAIN MAP

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.





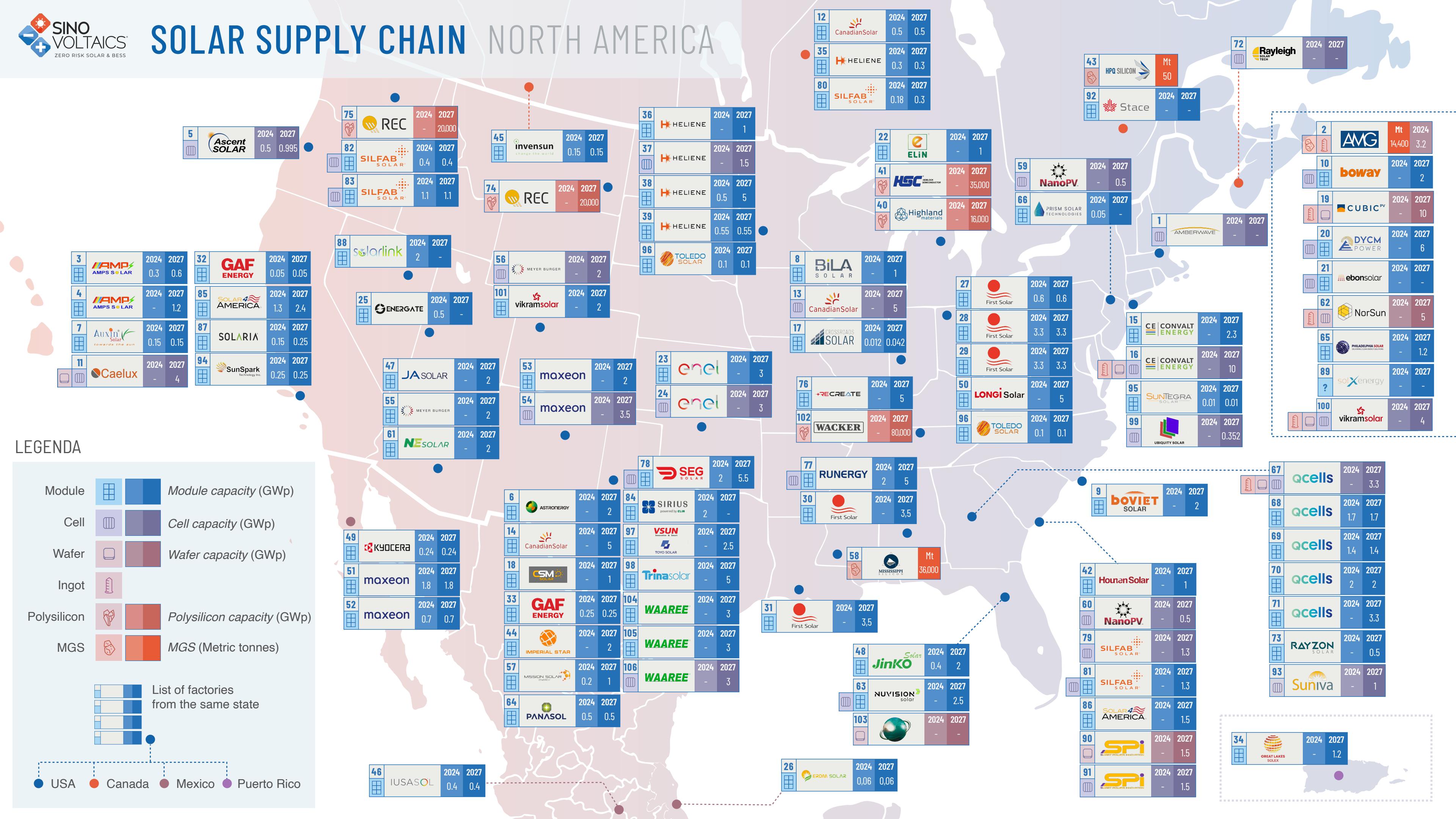
February 2025

The Sinovoltaics Supply Chain Map (SSCM) - North America Edition 1 2025 includes several notable changes since our last report.

- **Several new factories have been added.** These include Amps Solar, Boviet Solar, DYCM Power, Ebon Power, Imperial Star Solar, NuVison, EsFoundry, ReCreate, and Toyo/VSUN.
- **Capacity reductions.** Meyer Burger has scrapped its plans for a 2GW cell manufacturing site in Colorado.
- **We've corrected the manufacturing capacity of First Solar in Mexico.** Their total capacity is 21.2 GW, including non-North America sites.
- **Capacity expansion totals have been updated.** SSCM - North America for Q2 shows a total of 31.92 GW of module production capacity spread throughout Mexico, Canada, and the US. These manufacturers are now forecasting an expansion of 97.9 GW in the coming 3 - 6 years (a total of 129.9 GW).
- **North American cell production is still constrained.** Although manufacturers are making great strides in increasing cell production from 8 GW to 64.9 GW by 2027/2030 (with entries like EsFoundry) and wafer production from 3.2 GW to 24.5 GW by 2027/2030, current cell capacity remains the Achilles heel of the market.
- **Polysilicon production is also constrained.** The main polysilicon suppliers in North America are now Hemlock Semiconductor, Wacker Mississippi Silicon, and Highland Materials, with an estimated total of 171,000 metric tons of production capacity.



SOLAR SUPPLY CHAIN NORTH AMERICA



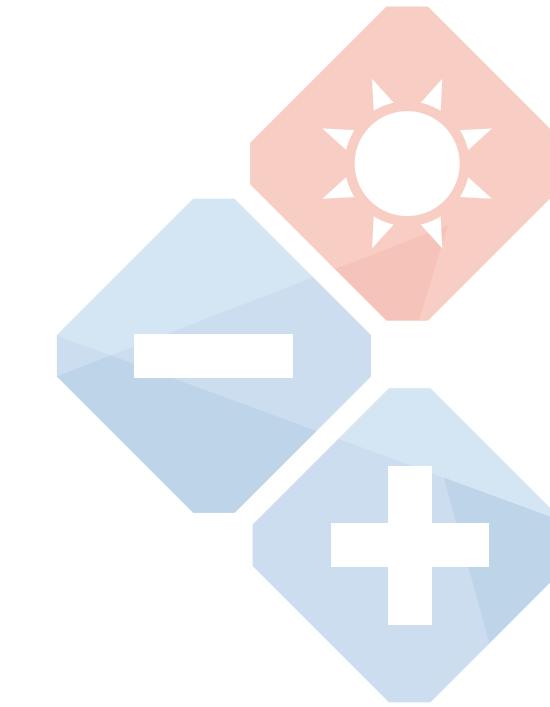
N	Company Name	State / Country	Module		Cell		Wafer		Ingot		Polysilicon		MGS		Website	Email address		
			GWp		GWp		GWp		GWp		GWp		Metric Tonnes					
			2024	2027	2024	2027	2024	2027	2024	2027	2024	2024	2024	2024				
1	AmberWave	Massachussets, USA	-	-	-	-	-	-	-	-	-	-	-	-	http://www.amberwave.com/	-		
2	AMG Advanced Metallurgical Group	USA	-	-	-	-	-	-	3.2	-	-	14,400	-	-	https://amg-nv.com/	-		
3	AMPS Solar USA	California, USA	0.3	0.6	-	-	-	-	-	-	-	-	-	-	https://sinotecsolar.com/	-		
4	AMPS Solar USA	California, USA	-	1.2	-	-	-	-	-	-	-	-	-	-	https://sinotecsolar.com/	-		
5	Ascent Solar	Oregon, USA	-	-	0.05	0.995	-	-	-	-	-	-	-	-	www.ascentsolar.com	-		
6	Astronergy/Chint	Texas, USA	-	2	-	-	-	-	-	-	-	-	-	-	www.astronergy.com	-		
7	Auxin Solar (OEM)*	California, USA	0.15	0.15	-	-	-	-	-	-	-	-	-	-	http://www.auxinsolar.com/	salesusa@auxinsolar.com		
8	Bila Solar	Indiana, USA	-	1	-	-	-	-	-	-	-	-	-	-	https://www.bilasolar.com/	-		
9	Boviet Solar	North Carolina, USA	-	2	-	-	-	-	-	-	-	-	-	-	www.bovetsolar.com	-		
10	BoWav Allov	USA	-	2	-	2	-	-	-	-	-	-	-	-	https://www.bowayalloy.com/en/	-		
11	Caelux	California, USA	-	-	-	4	-	4	-	-	-	-	-	-	https://caelux.com/	-		
12	Canadian Solar	Ontario, Canada	0.5	0.5	-	-	-	-	-	-	-	-	-	-	https://www.canadiansolar.com/	-		
13	Canadian Solar	Texas, USA	-	-	-	5	-	-	-	-	-	-	-	-	https://www.canadiansolar.com/	-		
14	Canadian Solar	Indiana, USA	-	5	-	-	-	-	-	-	-	-	-	-	https://www.canadiansolar.com/	-		
15	Convalt Energy	New York, USA	-	2.3	-	-	-	-	-	-	-	-	-	-	https://convalt.com/	-		
16	Convalt Energy	New York, USA	-	-	-	10	-	-	-	-	-	-	-	-	https://convalt.com/	-		
17	Crossroads Solar	Indiana, USA	0.03	0.042	-	-	-	-	-	-	-	-	-	-	http://www.crossroads-solar.com/	patrickkregan@crossroads-solar.com		
18	CSM	Texas, USA	-	1	-	-	-	-	-	-	-	-	-	-	-	-		
19	CubicPV	USA	-	-	-	-	-	10	-	-	-	-	-	-	https://cubicpv.com/	-		
20	DYCM Power	USA	-	6	-	6	-	-	-	-	-	-	-	-	www.dycmpower.com	-		
21	Ebon Solar	USA	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
22	Elin Energy	Michigan, USA	-	1	-	-	-	-	-	-	-	-	-	-	https://elin.com.tr/en/home/	elin@elin.com.tr		
23	Enel/3Sun	Oklahoma, USA	-	3	-	-	-	-	-	-	-	-	-	-	https://www.3sun.com/en	-		
24	Enel/3Sun	Oklahoma, USA	-	-	-	3	-	-	-	-	-	-	-	-	https://www.3sun.com/en	-		
25	Energate	Utah, USA	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-		

N	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	2024	2024	2024				
26	ERDM-Solar	Veracruz, Mexico	0.06	0.06	-	-	-	-	-	-	-	-	-	-	https://erdm-solar.com/home-es/en/	info@erdm-solar.com		
27	First Solar 1	Ohio, USA	0.6	0.6	-	-	-	-	-	-	-	-	-	-	https://www.firstsolar.com/	-		
28	First Solar 2	Ohio, USA	3.3	3.3	-	-	-	-	-	-	-	-	-	-	https://www.firstsolar.com/	-		
29	First Solar 3	Ohio, USA	3.3	3.3	-	-	-	-	-	-	-	-	-	-	https://www.firstsolar.com/	-		
30	First Solar 4	Alabama, USA	-	3.5	-	-	-	-	-	-	-	-	-	-	https://www.firstsolar.com/	-		
31	First Solar 5	Louisiana, USA	-	3.5	-	-	-	-	-	-	-	-	-	-	https://www.firstsolar.com/	-		
32	GAF Energy	California, USA	0.05	0.05	-	-	-	-	-	-	-	-	-	-	https://www.gaf.energy/home_test/	-		
33	GAF Energy 2	Texas, USA	0.25	0.25	-	-	-	-	-	-	-	-	-	-	https://www.gaf.energy/home_test/	-		
34	Great Lakes Solex	Puerto Rico	-	1.2	-	-	-	-	-	-	-	-	-	-	https://greatlakessolex.com/	-		
35	Heliene	Ontario, Canada	0.3	0.3	-	-	-	-	-	-	-	-	-	-	https://heliene.com/	sales@heliene.com		
36	Heliene	Minnesota, USA	-	1	-	-	-	-	-	-	-	-	-	-	https://heliene.com/	sales@heliene.com		
37	Heliene	Minnesota, USA	-	-	-	1.5	-	-	-	-	-	-	-	-	https://heliene.com/	sales@heliene.com		
38	Heliene 1	Minnesota, USA	0.5	5	-	-	-	-	-	-	-	-	-	-	https://heliene.com/	sales@heliene.com		
39	Heliene 2	Minnesota, USA	0.55	0.55	-	-	-	-	-	-	-	-	-	-	https://heliene.com/	sales@heliene.com		
40	Hemlock	Michigan, USA	-	-	-	-	-	-	-	-	-	35,000	-	-	https://www.hscpoly.com/	-		
41	Highland Materials	Tennessee, USA	-	-	-	-	-	-	-	-	-	16,000	-	-	-	-		
42	Hounen Solar/C&D Clean Energy	South Carolina, USA	-	1	-	-	-	-	-	-	-	-	-	-	https://hounensolar.com/	info@hounensolar.com		
43	HPQ Silicon	Quebec, Canada	-	-	-	-	-	-	-	-	-	50	-	-	https://hpqsilicon.com/	-		
44	Imperial Star Solar	Texas, USA	-	2	-	-	-	-	-	-	-	-	-	-	https://www.imperialstar.com/	-		
45	Invensun	Alberta, Canada	0.15	0.15	-	-	-	-	-	-	-	-	-	-	https://www.invensun.com/	partner@invensun.com info@invensun.com		
46	IUSASOL	Mexico, Mexico	0.4	0.4	-	-	-	-	-	-	-	-	-	-	https://www.iusasol.mx/	contacto@iusasol.mx		
47	JA Solar	Arizona, USA	-	2	-	-	-	-	-	-	-	-	-	-	https://www.jasolar.com/html/en/	sales@jasolar.com		
48	JinkoSolar	Florida, USA	0.4	2	-	-	-	-	-	-	-	-	-	-	https://www.jinkosolar.com/en/	-		
49	Kyocera	Baja California, Mexico	0.24	0.24	-	-	-	-	-	-	-	-	-	-	https://asia.kyocera.com/products/solar/	-		
50	LONGi (Illuminate USA)	Ohio, USA	-	5	-	-	-	-	-	-	-	-	-	-	https://www.longi.com/en/	-		

N	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	2024	2024	2024				
51	Maxeon Solar Technologies	Baja California, Mexico	1.8	1.8	-	-	-	-	-	-	-	-	-	-	https://maxeon.com/	-		
52	Maxeon Solar Technologies	Baja California, Mexico	0.7	0.7	-	-	-	-	-	-	-	-	-	-	https://maxeon.com/	-		
53	Maxeon Solar Technologies	New Mexico, USA	-	2	-	-	-	-	-	-	-	-	-	-	https://maxeon.com/	-		
54	Maxeon Solar Technologies	New Mexico, USA	-	-	-	3.5	-	-	-	-	-	-	-	-	https://maxeon.com/	-		
55	Meyer Burger	Arizona, USA	-	2	-	-	-	-	-	-	-	-	-	-	https://www.meyerburger.com/en/solar-products-for-private-use	-		
56	Meyer Burger	Colorado, USA	-	-	-	2	-	-	-	-	-	-	-	-	https://www.meyerburger.com/en/solar-products-for-private-use	-		
57	Mission Solar	Texas, USA	0.2	1	-	-	-	-	-	-	-	-	-	-	https://missionsolar.com/	info@missionsolar.com		
58	Mississippi Silicon	Mississippi, USA	-	-	-	-	-	-	-	-	-	36,000	-	-	https://www.missilicon.com/	-		
59	NanoPV	New Jersey, USA	-	-	-	0.5	-	-	-	-	-	-	-	-	http://www.nano-pv.com/	-		
60	NanoPV	Georgia, USA	-	0.5	-	-	-	-	-	-	-	-	-	-	http://www.nano-pv.com/	-		
61	NE Solar/ZNShine	Arizona, USA	-	2	-	-	-	-	-	-	-	-	-	-	https://www.znshinesolar.com/	info@znshinesolar.com		
62	NorSun	USA	-	-	-	5	-	-	-	-	-	-	-	-	https://www.norsun.no/	-		
63	Nu Vision	Florida, USA	-	2.5	-	2.5	-	-	-	-	-	-	-	-	-	-	-	
64	Panasol	Texas, USA	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	
65	Philadelphia Solar/Translucent Energy	USA	-	1.2	-	-	-	-	-	-	-	-	-	-	https://philadelphia-solar.com/	info@philadelphia-solar.com		
66	Prism Solar	New Jersey, USA	0.05	-	-	-	-	-	-	-	-	-	-	-	https://prismsolar.com/	sales@prismsolar.com		
67	Qcells	Georgia, USA	-	-	-	3.3	-	-	-	-	-	-	-	-	https://www.hanwha.com/en/products_and_services/affiliates/hanwha-q_cells.html	-		
68	Qcells 1	Georgia, USA	1.7	1.7	-	-	-	-	-	-	-	-	-	-	https://www.hanwha.com/en/products_and_services/affiliates/hanwha-q_cells.html	-		
69	Qcells 2	Georgia, USA	1.4	1.4	-	-	-	-	-	-	-	-	-	-	https://www.hanwha.com/en/products_and_services/affiliates/hanwha-q_cells.html	-		
70	Qcells 3	Georgia, USA	2	2	-	-	-	-	-	-	-	-	-	-	https://www.hanwha.com/en/products_and_services/affiliates/hanwha-q_cells.html	-		
71	Qcells 4	Georgia, USA	-	3.3	-	-	-	-	-	-	-	-	-	-	https://www.hanwha.com/en/products_and_services/affiliates/hanwha-q_cells.html	-		
72	Rayleigh Solar Tech	Nova Scotia, Canada	-	-	-	-	-	-	-	-	-	-	-	-	https://rayleighsolartech.com/	-		
73	Rayzon Solar (Adion Solar)	Georgia, USA	-	0.5	-	-	-	-	-	-	-	-	-	-	https://www.rayzonsolar.com/	contact@rayzonenergies.com		
74	REC	Montana, USA	-	-	-	-	-	-	-	-	-	20,000	-	-	https://www.recgroup.com/en	-		
75	REC	Washington, USA	-	-	-	-	-	-	-	-	-	20,000	-	-	https://www.recgroup.com/en	-		

N	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	2024	2024	2024				
76	Recreate	Tennessee, USA	-	5	-	-	-	-	-	-	-	-	-	-	-	-		
77	Runergy	Alabama, USA	2	5	-	6	-	-	-	-	-	-	-	-	-	-		
78	SEG Solar	Texas, USA	2	5.5	-	2	-	-	-	-	-	-	-	-	https://www.segsolar.com/	info@segsolar.com		
79	Sifab	South Carolina, USA	-	-	-	1.3	-	-	-	-	-	-	-	-	https://silfabsolar.com/	-		
80	Sifab Solar	Ontario, Canada	0.18	0.3	-	-	-	-	-	-	-	-	-	-	https://silfabsolar.com/	-		
81	Sifab Solar-Southeast	South Carolina, USA	-	1.3	-	1	-	-	-	-	-	-	-	-	https://silfabsolar.com/	-		
82	Sifab Solar - WA1	Washington, USA	0.4	0.4	0.4	0.5	-	-	-	-	-	-	-	-	https://silfabsolar.com/	-		
83	Sifab Solar - WA2	Washington, USA	1.1	1.1	0.4	0.5	-	-	-	-	-	-	-	-	https://silfabsolar.com/	-		
84	Sirius (Elin Energy)	Texas, USA	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
85	Solar4America	California, USA	1.3	2.4	-	-	-	-	-	-	-	-	-	-	https://solar4america.com/	pvsales@solar4america.com		
86	Solar4America	South Carolina, USA	-	1.5	-	-	-	-	-	-	-	-	-	-	https://solar4america.com/	pvsales@solar4america.com		
87	Solaria	California, USA	0.15	0.25	-	-	-	-	-	-	-	-	-	-	https://www.solaria.com/	-		
88	SolarLink	Nevada, USA	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
89	Solx	/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
90	SPI Energy (SEM Wafertech)	South Carolina, USA	-	-	-	-	-	-	1.5	-	-	-	-	-	https://semwafer.com/	-		
91	SPI Energy (Solar4America)	South Carolina, USA	-	-	-	1.5	-	-	-	-	-	-	-	-	https://solar4america.com/	-		
92	Stace	Quebec, Canada	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
93	Suniva	Georgia, USA	-	-	-	1	-	-	-	-	-	-	-	-	https://suniva.com/	-		
94	SunSpark/SolarMax (OEM)*	California, USA	0.25	0.25	-	-	-	-	-	-	-	-	-	-	https://www.solarmaxtech.com/solar-products/smx-solar-panels/	sales@solarmax.com		
95	SunTegra	New York, USA	0.01	0.01	-	-	-</											





ARE YOU A SOLAR MANUFACTURER?

In our next edition of the North America 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

Call with manufacturers

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

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

https://finance.yahoo.com/news/16-largest-silicon-producers-world-212541541.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAJhloJeDhOMkkSZ6fuAX6Xt7Xs0LSLx84lsCJmupl_mfZsHGHcFXByXISwR2-R4T9CG65hibs9X8vGuZfCwKGtiJFQLtqfdsgGySw75TTdtloCfXBE2hoEB24mwVlyP4Cd_1y_AGbLV2Bv61NvfkEgujZKTN9X3tgk17DgSRP-w

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

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Solar Flare Report

<https://www.solarpowerworldonline.com/u-s-solar-panel-manufacturers/>

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<https://www.photon.info/en/news/silfab-solar-increases-module-capacity-120-mw>

<https://amg-nv.com/investors/press-release/amg-announces-expansion-of-production-capacity-for-solar-grade-silicon/>

<https://www.pv-magazine.com/2018/08/15/hpq-silicons-plan-to-launch-integrated-pv-production-moves-forward/>

<https://www.globenewswire.com/news-release/2018/11/13/1650620/0/en/Canadian-Metals-officially-begins-its-Industrial-Definitive-Feasibility-Study-for-the-first-commercial-DC-furnace-in-the-world-to-produce-silicon.html>

<https://www.gob.mx/epn/es/articulos/primeras-fases-de-la-fabrica-de-paneles-solares-iudasol-y-central-solar-fotovoltaica-don-alejo#:~:text=%2D%20En%20su%20totalidad%2C%20este%20proyecto,fotovoltaica%20m%C3%A1s%20grande%20de%20Latinoam%C3%A9rica.>

<https://www.stacelectric.com/wp-content/uploads/2017/01/STACE-Solar-Solution-Brochure-EN.pdf>

<https://www.solarpowerworldonline.com/u-s-solar-panel-manufacturers/>

<https://convalt.com/Watertown4GW.html>





ELIMINATE RISKS AND GUARANTEE PROJECT ROI

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