

Global Solar Market Update



Increasing demand for unconventional energy sources is driving a global market that's expected to reach nearly \$374 billion by 2029.

Valued at \$167.8 billion in 2021, the global solar market is expected to reach \$373.8 billion by 2029 according to a new [Solar Power Market Size 2023](#) Fortune Business Insights report. Currently, the global solar market is largely being driven by “increasing demand for unconventional sources of energy,” the company says.

“This, along with the growing awareness about the detrimental effects of carbon emissions on the environment, is positively influencing market growth,” Fortune Business Insights adds. “Furthermore, the increasing support by the governments of various countries and rising investments and funding in research and development activities are significantly contributing to the market growth.”

A market dominated by larger organizations like Canadian Solar Inc., JinkoSolar Holding Co., Ltd., Trina Solar Co. Ltd. and SunPower Corp., global solar manufacturing currently has a significant presence in North America, Europe, Asia-Pacific, South America and the Middle East and Africa.

U.S. Solar Trends

According to the latest [Energy Information Administration \(EIA\) report](#), renewables now provide just over 22% of the total U.S. electrical energy generation. That included 14.3% growth (compared to 2021's numbers covering a similar time-frame) and a prediction that renewables may soon be providing one-quarter of the nation's electrical energy generation.

More specifically, the Solar Energy Industries Association (SEIA) says that the U.S. solar industry installed 6.1 gigawatts-direct current (GWdc) of capacity in the first quarter of 2023, a 47% increase from the first quarter of 2022 and a 19% decrease compared to the fourth quarter of last year. “This was the best first quarter in the industry's history, led by delayed utility-scale solar projects coming online,” SEIA says in its [report](#).

Each segment had a record-setting first quarter, except for community solar, which faced interconnection and siting challenges in several key state markets. The residential segment set a first quarter record and would have likely set another overall quarterly record had it not been for intense rainstorms that hampered installation crews, according to SEIA.

Overall, photovoltaic solar (PV) accounted for 54% of all new electricity-generating capacity additions in the first quarter of 2023. “Utility-scale solar installations were up 66% compared to the first quarter of 2022,” it adds. “The industry is still operating in a supply-constrained environment, but conditions are improving as module shipments are finally making their way through ports.”

New Job Opportunities Emerge

As the solar energy sector continues to expand, it has been adding new employment opportunities across a broad range of job roles. “The U.S. solar industry has created thousands of jobs in areas like manufacturing, installation and sales,” [MarketWatch](#) reports. “There are more than 255,000 workers

in the U.S. solar industry. The growth rate of solar jobs is also five times faster than the overall job growth rate in the U.S.”

The U.S. Bureau of Labor Statistics lists “solar photovoltaic installer” among the projected fastest-growing occupations between 2021 and 2031, MarketWatch points out, with an expected growth rate of 27%. California is responsible for nearly 40% of solar capacity in the U.S. According to [SolarStates.org](#), California’s solar companies employ more than 75,000 workers, which represents nearly 30% of the industry’s nationwide workforce.

Residential Solar Gains in Popularity

Looking ahead, MarketWatch expects more than one in seven U.S. homeowners to have solar panels on their roofs by 2030. Between June and September 2022, for the first time on record, the U.S. installed over 1,500 MW of capacity through home solar systems during a single quarter. SEIA says home solar power will grow by around 6,000 to 7,000 MW per year between 2023 and 2027.

“With favorable sunshine conditions, a 5-kilowatt (kW) home solar system can generate over 7,500 kWh per year,” MarketWatch says. “If you consider an electricity price of 20 cents per kWh, that’s equivalent to more than \$1,500 in power bill savings in one year.”