World solar power generation capacity

Overview

As of 2023, China has the largest solar energy capacity in the world at 609,921 megawatts (MW), contributing approximately 3% to the country's total electricity production. It is followed by the United States at 139,205 MW and Japan at 89,077 MW. A report from the National Renewable Energy Laboratory found that solar power accounted for 54% of new U. Solar power plants use one of two technologies: Photovoltaic (PV) systems use solar panels, either on rooftops or in. Cumulative installed solar capacity, measured in gigawatts (GW). In the first six months of 2025, the world added 380 GW of new solar capacity — 64% higher than during the same period in 2024, when 232 GW were installed.

World solar power generation capacity

Global solar installations surge 64% in first half of 2025

Global solar installations are on track for another record year. In the first six months of 2025, the world added 380 GW of new solar capacity -- 64% higher than during the same period in ...

Renewable electricity - Renewables 2025 - Analysis

Growth in utility-scale and distributed solar PV more than doubles, representing nearly 80% of worldwide renewable electricity capacity expansion. Low module costs, relatively efficient permitting processes ...

Solar power by country

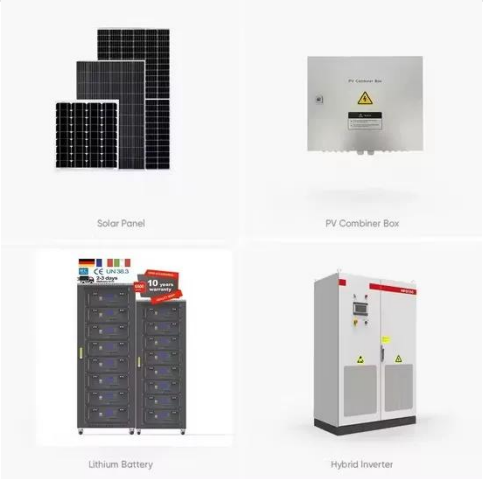
OverviewAsiaGlobal use figuresAfricaEuropeNorth AmericaOceaniaSouth America

Armenia due its geographical and climate properties is well-suited for the solar energy utilization. According to the Ministry of Energy Infrastructure and Natural Resources of Armenia the

country is capable of producing 1850 kWh/m per year. For comparison European countries are capable of around 1000 kWh/m per year on average. Two main panel types utilized in Armenia are the photovoltaic and thermal solar panels. The ...

Solar Power by Country 2026

Data and analysis including a list of solar power in every country in the world, countries with the most solar power, and countries that generate the highest percentage of their electricity from solar power.



Global Market Outlook for Solar Power 2025-2029

Global solar installations reached nearly 600 GW - an impressive 33% increase over the previous year - setting yet another record. Solar accounted for 81% of all new renewable energy ...

Solar power by country

The worldwide growth of photovoltaics is extremely dynamic and varies strongly by country. In April 2022, the total global solar power capacity reached 1 TW, increasing to 2 TW in 2024. The top ...

Renewable Capacity Highlights 2025

Solar, in line with the previous year, accounted for the largest share of the global total, with a capacity of 1 865 GW. Renewable hydropower1 and wind energy accounted for most of the remainder, with total ...

Installed solar energy capacity

At the link below you can find a detailed description of the structure of our data pipeline, including links to all the code used to prepare data across Our World in Data.

Solar accounted for 70% of new global power capacity in 2024

Approximately 70% of newly installed

global electricity generating capacity for 2024 came from PV, with record installations in China (278 GW) and the U.S. (38 GW). Global PV installed

How Much Solar Energy Does the World Generate?

With global capacity surpassing 2,000 GW in 2024 and daily production reaching 2,075 GWh, solar energy is playing a crucial role in achieving climate goals. It provides affordable, sustainable, and ...

Contact Us

For catalog requests, pricing, or partnerships, please visit: https://kidsandparents.pl