Total photovoltaic panel production capacity

Overview

Global solar photovoltaic capacity has grown from around 40 gigawatts in 2010 to approximately 2. Only in that last year, installations increased by almost 40 percent. Will new PV manufacturing policies in the United States, India and the European Union create global PV supply diversification?

Manufacturing capacity and production in 2027 is an expected value based on announced policies and projects. APAC = Asia-Pacific region excluding India and China. [1][2] In 2023, China added 60% of the world's new capacity. 2 TW dc • China continued to dominate the global market, representing ~60% of 2024 installs, up 52% y/y. Data source: IRENA (2025) – Learn more about this data processed This is the citation of the original data obtained from the source, prior to any processing or adaptation by Our World in Data.

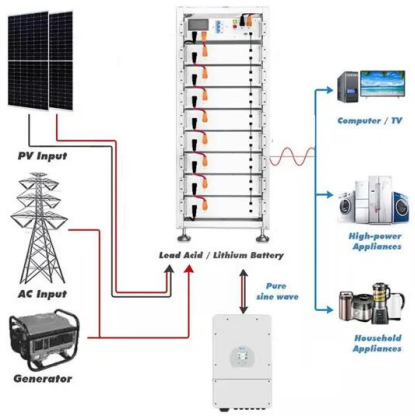
Total photovoltaic panel production capacity

[Installed solar energy capacity]

Depending on the data, this can include standardizing country names and world region definitions, converting units, calculating derived indicators such as per capita measures, as well as adding or adapting ...

[Spring 2025 Solar Industry Update]

of PV in 2024-- up 21% y/y. o At the end of 2024, solar was the second-largest source of U.S. generation capacity, though still a growing percentage of the U.S. electric generation mix. o In 2024, solar ...

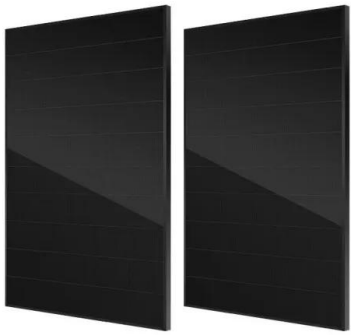


[Executive summary - Solar PV Global Supply Chains]

Global capacity for manufacturing wafers and cells, which are key solar PV elements, and for assembling them into solar panels (also known as modules), exceeded demand by at least 100% at the end of 2021.

[IEA: Global photovoltaic module production capacity will exceed 1.5TW]

According to the International Energy Agency (IEA), global solar panel production capacity will exceed 1.5TW by 2035. Its latest report, Energy Technology Outlook 2024, covers the solar, wind turbine, ...



Growth of photovoltaics

From 2016 to 2022, PV has seen an annual capacity and production growth rate of around 26%, doubling approximately every three years.

[Solar PV manufacturing capacity and production by country and region](#)

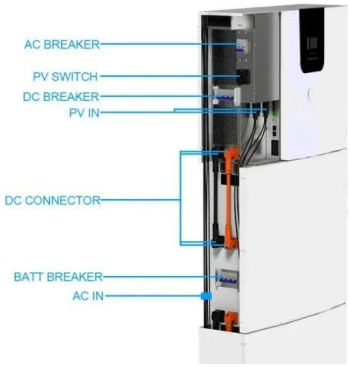
Solar PV manufacturing capacity and production by country and region, 2021-2027 - Chart and data by the International Energy Agency.

Snapshot 2025

At least 554 GW of new PV systems were commissioned in 2024, possibly reaching 601.9 GW. China installed up to 357.3 GW, accounting for almost 60% of new global capacity. Outside China, 244.6 GW were added, ...

[Total U.S. solar module manufacturing capacity grows by 71% in Q1 2024]

The report, released by the Solar Energy Industries Association (SEIA) and Wood Mackenzie, estimates that total U.S. solar module manufacturing capacity now exceeds 26 GW annually. In addition to ...



Solar PV Energy Factsheet

In 2024, global PV power capacity grew by 597 GW to reach 2.2 TW. Top installers were China (328 GW), the U.S. (48 GW), and India (30 GW). 21. Although pollutants and toxic substances are emitted during PV ...

Growth of photovoltaics

OverviewHistory of market developmentSolar PV nameplate capacityCurrent statusHistory of leading countriesSee alsoExternal links

The average price per watt dropped drastically for solar cells in the decades leading up to 2017. While in 1977 prices for crystalline silicon cells were about $77 per watt, average spot prices in August 2018 were as low as $0.13 per watt or nearly 600 times less than forty years ago. Prices for thin-film solar cells and for c-Si solar panels were around $.60 per watt. Module and cell prices declined even further after 2014 (see pr...

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