

Global power supply from solar power



Overview

Solar Energy: Global Capacity, Growth Trends, and How Solar Power Works

TL;DR: Solar energy has become the world's fastest-growing electricity source, with global installed capacity exceeding 1,400 GW in 2024 and generation surpassing 1,300 TWh annually.

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Electricity Mix

The chart below shows the percentage of global electricity production that comes from nuclear or renewable energy, such as solar, wind, hydropower, wind and

[At a Glance: How Renewable Energy Is Transforming the Global](#)

Solar PV contributed 56% of new electricity generating capacity in 2022, yet it provided only around 5% of global electricity generation. This contrast highlights both solar PV's significant



[Solar Energy: Global Capacity and Growth Trends](#)

Solar energy is the fastest-growing electricity source globally. Explore installed capacity, cost trends, top countries, technology types, and future projections.

[Exclusive: Renewables grew to almost 50% of global electricity](#)

Renewable power made up almost 50% of the world's electricity capacity last year after a record increase in solar installations, data from the International Renewable Energy Agency shared



[RENEWABLE ENERGY IN ENERGY SUPPLY](#)



[Global](#)

Investment in renewable energy and enabling technology manufacturing grew 70% in 2023, mainly in solar PV and batteries. In 2023, 24 countries updated their

Global Electricity Review 2025 , Ember

Record renewables growth led by solar helped push clean power past 40% of global electricity in 2024, but heatwave-related demand spikes led to a small increase in fossil generation.



[Solar energy status in the world: A comprehensive review](#)

It examines the current state of solar power and related academic solar energy research in different countries, aiming to provide valuable guidance for researchers, designers, and policymakers

[Probabilistic projections of global wind and solar power growth based](#)

Here, we develop PROLONG: a data-driven model of global wind and solar power growth that draws on national deployment trajectories and recurring growth phases.



[The Outlook for Global Solar Energy Continues to Be Bright](#)

Policymakers in some of the world's largest economies are reducing support for solar power generation. Even so, Goldman Sachs Research expects rapid growth in the sector, with global

[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



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.

[Executive summary - Renewables 2025 - Analysis](#)

Solar PV accounts for almost 80% of the global increase, followed by wind, hydropower, bioenergy and geothermal. In more than 80% of countries worldwide, renewable power capacity is set to grow faster



Global Solar Power Tracker

The Global Solar Power Tracker is composed of worldwide facility-level data on utility-scale (1 MW+) solar photovoltaic (PV) and solar thermal facilities, as well as country-aggregated distributed (<1

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