

# **US Wind Solar Thermal and Storage**





## Overview

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Will solar and wind energy lead the growth in US power generation?

Solar and wind energy will lead the growth in U.S. power generation for at least the next two years, according to EIA estimates. This report uses data from the EIA to analyze solar and wind capacity and generation over the past decade (2014 to 2023) in all 50 states and the District of Columbia.

Are solar and wind the future of energy?

Solar and wind account for more of our nation's energy mix than ever before. To study America's growing renewable electricity capacity and generation, Climate Central analyzed historical data on solar and wind energy over a 10-year period (2014 to 2023).

Where do solar and wind power data come from?

All national and state-level data come from the U.S. Energy Information Administration (EIA). Utility-scale solar and wind summer capacity values for 2014-2022 are as reported in EIA's Historical State Data for each year.

How many GW of solar will be installed this year?

The US Energy Information Administration (EIA) projects 32.5 GW of solar, 18.2 GW of energy storage, and 7.7 GW of wind will be deployed this year. These additions will make up nearly 93% of total new capacity, which is expected to hit a record 63 GW. From pv magazine USA.

What percentage of US electricity is generated by wind?

In March alone, wind-generated electricity increased by 11.1% and provided 14.8% of the US electricity supply. In Q1 2025, electrical generation by wind plus utility-scale and small-scale solar provided 19% of the US total, up from 17% year-over-year. In just the month of March, solar + wind accounted for 23.9% of U electrical output.



Will solar & wind power the US by 2035?

Solar and wind (combined) are expected to make up a majority of electricity capacity in most U.S. states by 2035 under optimistic current policy scenarios. All national and state-level data come from the U.S. Energy Information Administration (EIA).



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[These 4 energy storage technologies are key to climate efforts](#)

Pumped hydro, batteries, thermal and mechanical energy storage store solar, wind, hydro and other renewable energy to supply peaks in demand for power.

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[U.S. Energy Storage Made Record Gains Last Year](#)

Last year saw a record buildout of energy storage in the U.S., with battery and thermal storage growing by 73 percent, a new report finds. As the U.S. shifts to renewable ...

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Australia's transition to renewables is gathering speed, but ...

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The United States added 22,332 megawatts of power plant capacity in the first half of this year, and the vast majority of it was utility-scale solar, ...



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[Solar, battery storage to lead new US capacity in 2025](#)

In 2025, capacity growth from battery storage could set a record with an expected 18.2 GW of utility-scale installations to be added to the grid. US battery storage achieved record growth in ...

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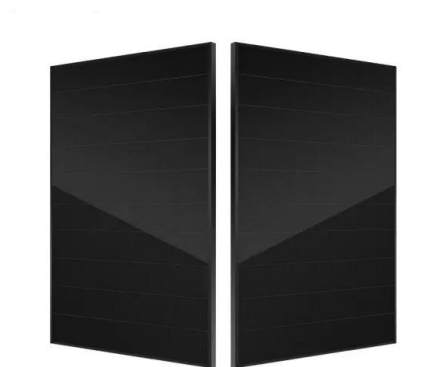




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However, we assume that battery storage in the solar photovoltaic (PV) hybrid system recharges exclusively from the co-located solar facility, and so it is eligible for the ITC with the same ...

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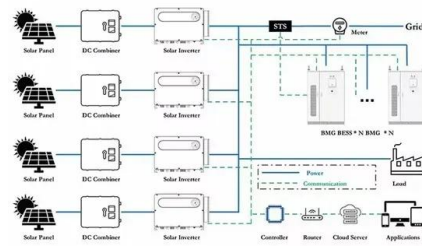




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Renewable sources--wind, solar, hydro, biomass, and geothermal--accounted for 22% of generation, or 874 billion kWh, last year. Annual renewable power generation ...

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All renewable energy sources, including wind + solar, produced more than a quarter of US electrical generation in Q1 2025 and provided nearly a third of total US electrical ...

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### [Electricity explained Energy storage for electricity generation](#)

Energy storage for electricity generation An energy storage system (ESS) for electricity generation uses electricity (or some other energy source, such as solar-thermal energy) to charge an ...

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