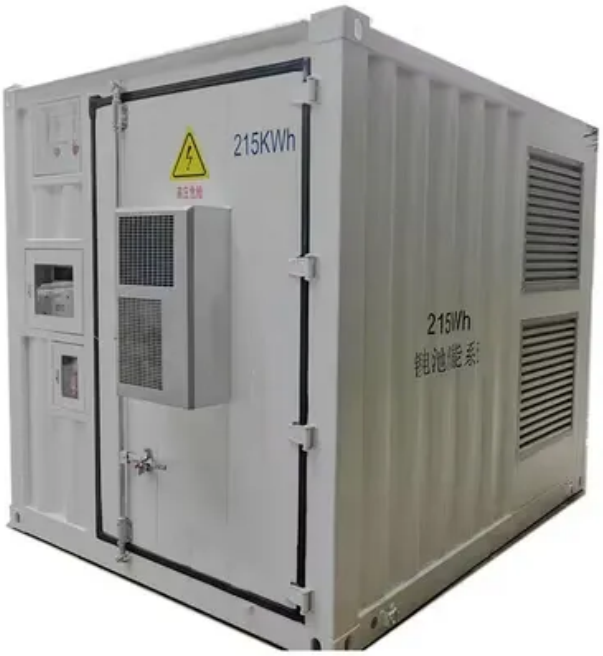
Solar360 Mobile Energy

Us solar capacity by state



Overview

Solar State By State Explore the latest solar market insights and policy updates in all 50 states and Washington, D.C. All market data is current through Q4 2024.

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Explore the latest solar market insights and policy updates in all 50 states and Washington, D.C. All market data is current through Q4 2024. Please enable JavaScript in your browser to complete this form. The Solar Energy Industries Association (SEIA) is leading the transformation to a clean.

In 2023, the United States generated approximately 4.18 trillion kilowatt-hours of total electricity at utility-scale power generation facilities, with renewable energy sources contributing roughly 21% of this total and solar power making up 3.9%. Since 2010, solar power capacity in the United.

Data from 2007 through 2023. Source: Berkeley Lab, Utility-Scale Solar 2024 Copyright (c) 2024, The Regents of the University of California, through Lawrence Berkeley National Laboratory (subject to receipt of any required approvals from the U.S. Dept. of Energy). All rights reserved. This work is.

California has by far the greatest installed capacity of solar photovoltaic (PV) power of any U.S. state. As of March 2025, the Golden State had a cumulative solar power capacity of over Log in or register to access precise data. gigawatts. Texas followed with a capacity of roughly Log in or.

We expect 63 gigawatts (GW) of new utility-scale electric-generating capacity to be added to the U.S. power grid in 2025 in our latest Preliminary Monthly Electric Generator Inventory report. This amount represents an almost 30% increase from 2024 when 48.6 GW of capacity was installed, the largest.

It is still #1 in terms of total installed solar capacity, residential solar capacity, and non-residential distributed solar power capacity (small solar power

systems not on homes). However, it is actually 2nd when it comes to utility-scale solar power. When you dig down to per capita capacity. How much solar power does California have?

Solar power capacity is steadily expanding throughout the United States, as more than half of the states now boast 1 gigawatt (GW) or greater of installed solar. California has set an ambitious goal of achieving 100% clean energy by 2045. The state has been at the forefront of renewable energy generation and solar power generation in particular.

Which state has the most solar power?

California has by far the greatest installed capacity of solar photovoltaic (PV) power of any U.S. state. As of June of 2024, the Golden State had a cumulative solar power capacity of over 48 gigawatts. Texas followed with a capacity of roughly 32 gigawatts. Both U.S. states also had the largest solar PV capacity additions in 2023.

Which states will add more solar capacity in 2025?

Texas (11.6 GW) and California (2.9 GW) will account for almost half of the new utility-scale solar capacity addition in 2025. We expect five other states (Indiana, Arizona, Michigan, Florida, and New York) each to account for more than 1 GW of added solar capacity in 2025 and collectively account for 7.8 GW of planned solar capacity additions.

What percentage of State Electricity is generated by solar energy?

In 2022, solar energy contributed 19% of the state's utility-scale electricity net generation. When adding small-scale generation, solar energy accounted for 27% of the state's total electricity generation. The solar industry employs more than 78,000 throughout the state.

How much solar power does New York have?

By the second quarter of 2023, New York had an installed solar capacity of 4,717 megawatts (MW), accounting for 4.75% of the state’s electric generation. New York aims to reach a solar energy installed capacity of 5,000 MW by 2025. In 2021, nearly 10% of Virginia's total electricity generation came from renewable resources.

How much solar energy does Texas generate?

When adding small-scale generation, solar energy accounted for 27% of the state's total electricity generation. The solar industry employs more than 78,000 throughout the state. Texas has become one of the leading states in both solar energy potential and solar power generation.

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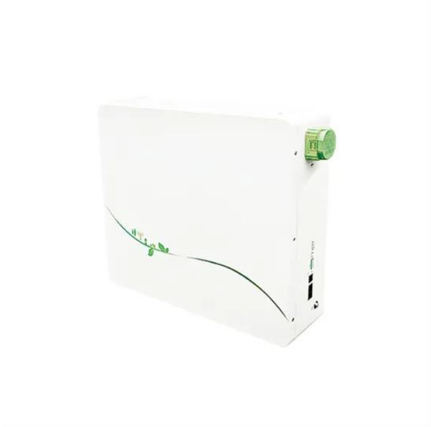
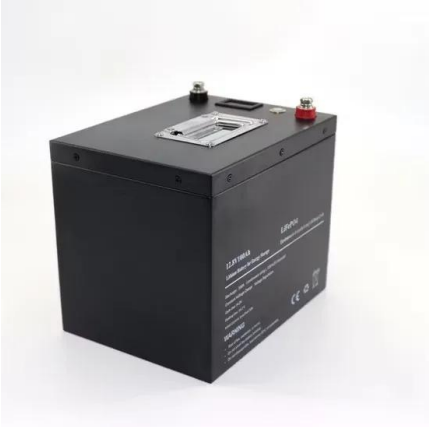


The Top Solar States of 2024

The Top Solar States of 2024 Solar energy is surging in every corner of the country, helping lower utility bills and improve grid reliability in every state. A decade ago, only three states had more than 1 gigawatt (GW) of solar ...

[The State (s) of Distributed Solar -- 2023 Update]

These solar arrays offer the same electric bill stability and savings as rooftop solar, but operate remotely under a subscription model. The map below illustrates the saturation of each state's distributed (non-utility ...



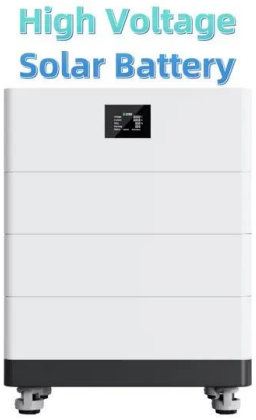
[Solar and battery storage to make up 81% of new U.S.]

Developers have scheduled the Menifee Power Bank (460.0 MW) at the site of the former Inland Empire Energy Center natural gas-fired power plant in Riverside, California, to come on line in 2024. With the rise of ...

U.S. residential solar PV capacity by state 2023, Statista

Residential solar PV capacity reached roughly 11.7 gigawatts in California in 2023. The state ranked first among all U.S. states by a wide

margin in terms of residential solar capacity. In total

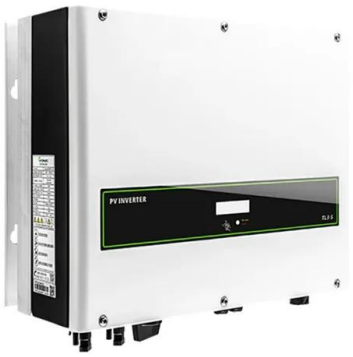


2022 monthly US solar capacity factors underscore winter doldrums

The average annual US solar capacity factor tracked closely to the norm in 2022, hovering near the mid-20% mark. But with a gap of more than 20 percentage points between apex and nadir, ...

[Chart: Which US states generate the most solar ...]

Renewable energy is surging remarkably in the U.S., with solar and wind power installations springing up across the country. A new report from Climate Central tracks the meteoric growth of these clean energy sources over ...

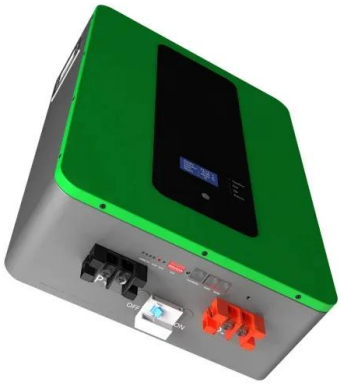


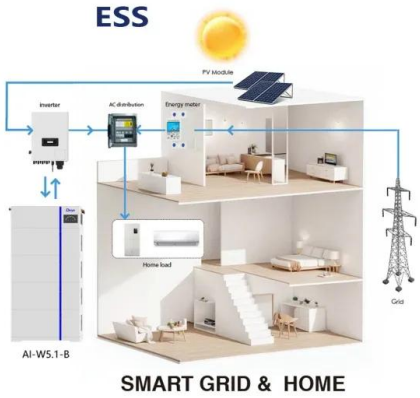
Solar exceeds 10% of U.S. electricity generation capacity

Solar now represents 10.53% of total available installed generating capacity in the United States, according to the Federal Energy Regulatory Commission (FERC). Solar capacity is approaching that of its ...

[The State (s) of Distributed Solar -- 2024 Update]

Distributed solar, which can be owned by individuals, small businesses, and public entities, is turning the electricity industry upside down as individuals choose to generate their own solar power on their rooftop or ...





Usual sun states shine bright at top of US solar capacity factor

The weighted average U.S. solar capacity factor stayed flat year over year in 2021. This possibly reflected greater operational efficiency, as more than 58% of the states individually operating in ...

[Utility-Scale PV , Electricity , 2023 , ATB , NREL]

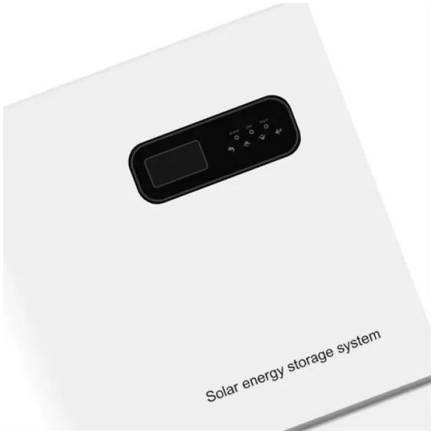
The reported U.S. system capacity factors are consistent with the range of estimated capacity factors in the 2023 ATB (21%-34% in 2021). The figure below shows historical data for capacity factor as a function of ILR, solar resource, ...

Electricity generation, capacity, and sales in the United States

Estimates of small-scale solar PV capacity and generation by state and sector are included in the . As of the end of 2023, California had about 35% of total U.S. small-scale solar PV electricity ...

U.S. total solar capacity to double over three-year span

The Energy Information Administration said cumulative solar installations are expected to double from 91 GW to 182 GW from the end of 2023 to the end of 2026. Meanwhile, battery energy storage capacity is expected to ...



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