

# Construction of wind solar and energy storage projects in Türkiye



## Overview

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How much wind energy is installed in Türkiye in 2024?

According to the 2024 renewable energy statistics published by the International Renewable Energy Agency (IRENA), Türkiye has reached a total installed power capacity of 11,697 MW by 2023 . In 2024, the total installed capacity of WPPs reached 13,000 MWe. Global wind energy installed capacity will increase by 143 GW in 2024.

Does Türkiye have a solar power plant?

The facilitation of self-consumption-focused power plant installations in Türkiye has accelerated annual new installations, pushing solar energy capacity beyond the current 2025 target. Türkiye's solar energy capacity doubled from 9.7 GW in July 2022 to exceed 19 GW by the end of 2024.

Does Türkiye have a potential for offshore wind?

Türkiye is also exploring its untapped offshore wind potential. With an estimated total offshore wind capacity of 75 GW, the country has set a target of 5 GW by 2035. In 2023, four regions along the Aegean and Marmara coasts were identified for offshore wind projects, with technical assessments and pre-feasibility studies underway.

How much wind power does Türkiye have?

As of the end of 2024, the total installed power has reached 13 GW and new installations continue rapidly. The wind potential of Türkiye is 118,683 MWe for wind speeds of over 6.8 m/s at a height of 50 m and the total WEP (Wind Energy Potential) of Türkiye is 48,000 MWe for regions with wind speeds of over 7 m/s.

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Türkiye could utilize untapped capacities to advance solar energy momentum through floating, storage-integrated, hybrid and rooftop solar potential. The country has a ...

Ember's Türkiye Electricity Review, published for the fourth consecutive year, analyses Türkiye's electricity generation and consumption data in 2024. The report also ...

Solar Power: 22.9 GW Wind Power: >13.5 GW Hydropower: 32.3 GW (around 27 percent

of total capacity) Geothermal Power: approximately ...

Primary renewable energy sources in Türkiye are hydroelectric power, biomass, wind, biogas, geothermal, and solar power. As Türkiye's energy consumption outpaces ...

Ihlas Holding has signed a strategic cooperation agreement with China Energy International (CEOIC), a subsidiary of Chinese energy ...

The 2022 National Energy Plan sets a target of achieving installed BESS capacity (with a discharge duration of two hours) of 2.1 GW by 2030 and 7.5 GW by 2035. Within the ...

Results show that offshore wind and hydrogen are promising systems shortly while solar and wave energy needs more research for Türkiye. The Marmara and Aegean Seas are ...

June 2025 - Türkiye continues to make significant strides in its transition towards a greener energy future. In this brochure, we provide an overview of the current structure and legal ...

While no grid-scale storage-integrated power plants are operational in Türkiye yet, the country has a robust pipeline of approximately 33 GW of storage-integrated wind and solar ...

According to the 2022 National Energy Plan, the government aims to increase the level of installed wind energy power to 29.6 GW by 2035. Türkiye's potential wind energy ...

Türkiye could utilize untapped capacities to advance solar energy momentum through floating, storage-integrated, hybrid and ...

Türkiye's Energy Transformation: Solar, Wind, and Green Investment Developments in

2024-2025 Türkiye has taken major steps in its energy transformation, ...

Both countries possess substantial renewable energy resources, including solar and wind. However, the integration of energy storage systems is necessary to maximize solar ...

Solar and wind power transition in Türkiye: An input-output analysis of growth, employment, and current account effects Abstract Türkiye ratified the Paris Agreement in 2021 ...

As of April 2025, Türkiye's total installed electricity generation capacity exceeds 118 GW. The country's three largest renewable energy sources-- hydroelectric (dam-based), ...

Türkiye's 2025 renewable energy tenders for wind and solar projects have yielded approximately EUR530 million (\$ 616.71 million) in upfront payments to the state budget, aiming to ...

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In 2016, Türkiye launched the Renewable Energy Resource Zone (YEKA) auctions to develop large-scale solar and wind projects, simplify the allocation of suitable lands, and ...

/LONDON, Septem, 14:00 GMT, RENEWABLE MARKET WATCH™/ Türkiye has announced plans to increase its renewable energy generation capacity with 60 GW of new ...

Further bolstering its renewable capacity, Turkey is investing in energy storage projects totaling 7.5 GW to stabilize its grid amid rising intermittent energy sources like wind ...

In line with Türkiye's target of 120 GW of installed power in wind and solar energy by 2035, the sector aims to invest 5 GW of wind annually. This target will ensure that all wind ...

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