## Average output of wind turbine



Average output of wind turbine

In 2023, the U.S. residential sector consumed 18.4 quads of primary energy, 19.7% of U.S. primary energy consumption.

Approximately 2% of the solar energy striking the Earth's surface is converted into kinetic energy in wind.1 Wind turbines convert the wind's kinetic energy to electricity without emissions1, and can be built on land or offshore in large bodies of water like oceans and lakes2. High wind speeds yield more energy because wind power is proportional to the cube of wind speed.4 Average annual wind speeds of 6.5m/s or greater at the height of 80m are generally considered commercially viable.New technologies are expanding the wind resources accessible for commercial projects.5 In 2023, wind energy generated 10% of U.S. electricity.6

Center for Sustainable Systems, University of Michigan. 2024. "Wind Energy Factsheet." Pub. No. CSS07-09.

1. Gustavson, M. (1979) "Limits to Wind Power Utilization." Science, 204(4388): 13-17.

2. U.S. DOE (2024) How Do Wind Turbines Works.https://

3. U.S. Department of Energy (DOE), National Renewable Energy Lab (NREL) (2017) U.S. Wind Resource Map.https://

4. Massachusetts Institute of Technology (2010) Wind Power Fundamentals.%20Energy%20101.pdf

5. U.S. DOE, Energy Efficiency and Renewable Energy (EERE) (2020) "U.S. Average Annual Wind Speed at 80 Meters."https://windexchange.energy.gov/maps-data/319

6. U.S. Energy Information Administration (EIA) (2024) Monthly Energy Review May 2024.https://

7.U.S.DOE,LBNL(2023)Land-BasedWindMarketReport.https://emp.lbl.gov/publications/land-based-wind-market-report-2023

8. U.S. DOE, NREL (2023) Offshore Wind Market Report.https://

9. NREL (2017) An Improved Global Wind Resource Estimate for Integrated Assessment Models.https://

Contact us for free full report

Web: https://kary.com.pl/contact-us/ Email: energystorage2000@gmail.com



Average output of wind turbine

WhatsApp: 8613816583346

