**Targets Propel Turbines**

**Nearly 78 GW of new wind power capacity was connected to the global power grid in 2022. This number is expected to grow to 136 GW each year over the next five years.**

To meet the challenge of providing affordable energy while also meeting daunting climate goals, experts are turning to wind power. Nearly 78 GW of wind power capacity was added to the global power grid in 2022 with the global wind market ready to add more than 100 GW for the first time this year, reports the Global Wind Energy Council (GWEC) in its “[Global Wind Report 2023](https://gwec.net/wp-content/uploads/2023/04/GWEC-2023_interactive.pdf).”

These numbers are even more intimidating if you look back at 2022. Overall the market added 77.6 GW worldwide last year with onshore providing 68.8 GW and offshore providing 8.8 GW. The onshore wind installation market came in at 5 percent lower than the previous year primarily because of falling installations in the United States, GWEC reported. Offshore additions, however, made 2022 the second highest year in history for offshore wind installations.

Total installed wind capacity stands at 906 GW. GWEC Market Intelligence expects that 680 GW of new capacity will be added over the next five years. This means there will be more than 136 GW of new installations per year until 2027. But despite a revised growth rate by GWEC Market Intelligence (YoY growth of 13 percent), the market will achieve 68 percent of the wind power capacity required to stay on track with net zero goals.

Graph from p. 92

New Installations in GW

Source: GWEC

Year onshore offshore Total

2018 46.3 4.4 50.7

2019 54.6 6.2 60.8

2020 88.4 6.9 95.3

2021 72.5 21.1 93.6

2022 68.8 8.8 77.6

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Graph on p. 32

Number of Jack-Up and Heavy Lift Vessels

Source: GWEC Market Intelligence Global Offshore Wind Turbine Installation Vessel Database, October 2022

Type/Geo In Operation Under Construction/Planned

Europe 79 16

China 84 23

Asia (not  
China 18 4

North  
America 2 4

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Pie Chart p. 25

Wind Turbine Manufacturing Capacity, 163 GW (2023)

Source: GWEC Market Intelligence, February

Country Percentage

China 60%

Europe 19%

United States 9%

India 7%

LATAM 4%

Other 1%