

Offshore Wind Turbine Market Poised for Strong Growth to 2031

Global Offshore Wind Turbine Industry Set to Hit \$39.2B by 2031, Fueled by Clean Energy Investments □

WILMINGTON, DE, UNITED STATES, October 9, 2025 /EINPresswire.com/ --

According to a new report published by Allied Market Research, the global offshore wind turbine market size was valued at \$17.8 billion in 2021 and is projected to reach \$39.2 billion by 2031, registering a CAGR of 8.28% from 2022 to 2031.



Offshore wind turbines enable efficient harnessing of wind power to produce clean, renewable, and sustainable electricity. As one of the most affordable and abundant renewable energy



Offshore wind turbine market to hit \$39.2B by 2031, growing at 8.28% CAGR, driven by renewable energy investments & technology \$\Pi\$"

Allied Market Research

sources, wind power plays a pivotal role in reducing dependence on fossil fuels and minimizing greenhouse gas emissions. With global governments emphasizing green transition, the offshore wind turbine market is witnessing rapid expansion.

Download PDF Brochure:

https://www.alliedmarketresearch.com/requestsample/17228

☐ Key Insights

Large turbines (>100 MW) represented three-fourths of total market share in 2021 and are expected to grow at a CAGR of 8.12%.

The industrial application segment is projected to record the fastest growth at 7.97% CAGR.

Asia-Pacific dominated the market with over 40% share and is expected to maintain its lead through 2031.
☐ Key Market Drivers and Opportunities
The increasing global shift toward <u>clean energy</u> is a primary driver of market growth. Governments worldwide are implementing supportive policies, subsidies, and clean energy targets that promote large-scale offshore wind projects. Offshore wind farms offer the advantage of stronger and more consistent wind speeds, leading to higher energy yields than onshore installations.
☐ Technological Advancements
Continuous innovation in turbine design, blade materials, and floating wind technology is making offshore wind power more cost-effective and efficient. Manufacturers are focusing on developing larger and more durable turbines that can withstand harsh marine environments while maximizing output.
☐ Government Initiatives and Energy Diversification
Global efforts to diversify energy sources and reduce reliance on fossil fuels are further fueling the demand for offshore wind turbines. Investments in renewable energy infrastructure, especially in Europe and Asia-Pacific, are accelerating the transition toward cleaner energy ecosystems.
□ Challenges
However, the market faces challenges such as high initial investment costs for manufacturing and installation. Offshore projects demand robust foundations, specialized vessels, and advanced electrical infrastructure, which increases capital requirements. Despite this, long-term cost benefits and declining technology costs continue to make offshore wind an attractive investment.
Procure This Report (299 Pages PDF with Insights, Charts, Tables, and Figures): https://www.alliedmarketresearch.com/checkout-final/df52e8ea85ad57b952579f8fc8b9fbd0
□□ Market Segmentation Overview
The global offshore wind turbine market is segmented based on capacity, application, and region:

By Capacity:

Medium (10–100 MW)
Large (Greater than 100 MW)
The large segment (>100 MW) dominates the market and is expected to maintain its lead through 2031. This segment's growth is driven by massive offshore projects such as Hecate Independent Power's \$30 billion HIP Atlantic Project, which aims to deploy around 10 GW of floating and fixed wind power in the North Atlantic region.
By Application:
Industrial
Commercial
Residential
The industrial segment holds the largest market share and is projected to grow at a CAGR of 7.97% during the forecast period. The increasing adoption of renewable energy by major manufacturing sectors, including chemicals and electronics, is boosting demand. Furthermore, ongoing research and development in turbine efficiency enhances productivity and reduces operational costs.
By Region:
North America
Europe
Asia-Pacific
LAMEA (Latin America, Middle East & Africa)
In 2021, Asia-Pacific accounted for over 40% of total revenue, dominating the global market. The region's dominance is attributed to strong government support, large coastal potential, and significant investments by major industry players in countries like China, Japan, and South Korea.
☐ Regional Trends

Small (Less than 10 MW)

Asia-Pacific:
The region is the global leader in offshore <u>wind energy</u> installations, with ongoing projects in China, Taiwan, and Japan. Rapid industrialization, strong government incentives, and technological partnerships are key factors driving regional growth.
Europe:
Europe continues to be a major offshore wind hub, supported by initiatives such as the European Green Deal and substantial investments in the North Sea wind farms.
North America:
The U.S. market is gaining traction with increasing government focus on sustainable energy policies and new offshore projects along the East Coast.
☐ Key Industry Players
Prominent companies driving the offshore wind turbine market include:
Enercon GmbH
General Electric (GE)
Goldwind
Nordex SE
Regen Powertech
Sinovel Wind Group
Suzlon Energy Limited
Zhejiang Windey
Vestas Wind Systems
Siemens Energy

These players are adopting strategies such as capacity expansion, acquisitions, partnerships, and R&D investments to strengthen their global market presence and enhance production capabilities.

☐ Impact of COVID-19 on the Offshore Wind Turbine Market

The COVID-19 pandemic temporarily disrupted the offshore wind turbine supply chain due to restrictions on raw material transport, workforce shortages, and project delays. This led to a slowdown in production and installation activities. However, as economies reopened and governments reinforced their renewable energy commitments, the market quickly recovered, regaining growth momentum.

Get a Customized Research Report: https://www.alliedmarketresearch.com/request-for-customization/A16850

Conclusion

The offshore wind turbine market stands at the forefront of the global clean energy revolution. With supportive government policies, advancing technologies, and rising demand for sustainable electricity, the sector is set for remarkable growth. As countries continue to invest in renewable energy infrastructure, offshore wind power will remain a key driver of global decarbonization and energy resilience through 2031 and beyond. $\Box\Box\Box$

Trending Reports in Energy and Power Industry:

Offshore Wind Turbine Market

https://www.alliedmarketresearch.com/offshore-wind-turbine-market-A16850

Offshore Wind Energy Market

https://www.alliedmarketresearch.com/offshore-wind-energy-market

Wind Energy Market

https://www.alliedmarketresearch.com/wind-energy-market-A10536

Small Wind Power Market

https://www.alliedmarketresearch.com/small-wind-power-market

Wind Turbine Market

https://www.alliedmarketresearch.com/wind-turbine-market

Direct Drive Wind Turbine Market

https://www.alliedmarketresearch.com/direct-drive-wind-turbine-market-A12847
Air-Borne Wind Turbine Market
https://www.alliedmarketresearch.com/air-borne-wind-turbine-market-A13810
Wind Turbine Foundation Market
https://www.alliedmarketresearch.com/wind-turbine-foundation-market
Floating Wind Turbine Market
https://www.alliedmarketresearch.com/floating-wind-turbine-market-A07598
Advanced Energy Market
https://www.alliedmarketresearch.com/advanced-energy-market-A15774
Renewable Energy Certificates Market
https://www.alliedmarketresearch.com/renewable-energy-certificates-market
Renewable Energy Market
https://www.alliedmarketresearch.com/renewable-energy-market
Distributed Energy Generation Market
https://www.alliedmarketresearch.com/distributed-energy-generation-market-A13784
U.S. Clean Energy Market
https://www.alliedmarketresearch.com/us-clean-energy-market-A325461
Clean Energy Infrastructure Market
https://www.alliedmarketresearch.com/clean-energy-infrastructure-market-A323711

https://www.alliedmarketresearch.com/ai-in-energy-market-A12587

Al in Energy Market

Clean Energy Market

https://www.alliedmarketresearch.com/clean-energy-market-A43785

Artificial Intelligence in Renewable Energy Market

https://www.alliedmarketresearch.com/artificial-intelligence-in-renewable-energy-market-A224072

About Us

Allied Market Research (AMR) is a full-service market research and business-consulting wing of Allied Analytics LLP based in Portland, Oregon. Allied Market Research provides global enterprises as well as medium and small businesses with unmatched quality of "Market Research Reports" and "Business Intelligence Solutions." AMR has a targeted view to provide business insights and consulting to assist its clients to make strategic business decisions and achieve sustainable growth in their respective market domain.

Pawan Kumar, the CEO of Allied Market Research, is leading the organization toward providing high-quality data and insights. We are in professional corporate relations with various companies and this helps us in digging out market data that helps us generate accurate research data tables and confirms utmost accuracy in our market forecasting. Each and every data presented in the reports published by us is extracted through primary interviews with top officials from leading companies of domain concerned. Our secondary data procurement methodology includes deep online and offline research and discussion with knowledgeable professionals and analysts in the industry.

David Correa
Allied Market Research
+ + + + + 1 800-792-5285
email us here
Visit us on social media:
LinkedIn
Facebook
YouTube
X

This press release can be viewed online at: https://www.einpresswire.com/article/856625810

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.				