# Floating wind turbine market set for explosive growth by 2032



The Floating Wind Turbine Market is poised for explosive growth, with a recent report indicating a projected increase from USD 0.51 billion in 2023 to USD 28.97 billion by 2032. This growth reflects a compound annual growth rate (CAGR) of an impressive 56.50% between 2024 and 2032, driven predominantly by the rising demand for renewable energy sources and the potential utilisation of deepwater wind resources.

Located further offshore, where winds are stronger and more consistent, floating wind turbines offer a viable solution to harnessing the significant offshore wind energy potential. The report highlights that nearly 80% of the world's offshore wind resources are found in waters deeper than 60 metres, areas that are typically inaccessible to traditional fixed-bottom wind turbines. This innovation not only provides a means to deploy wind turbines further from shore but also opens up new markets for renewable energy, capable of delivering power directly to population centres where more than 2.4 billion people reside within 100 kilometres of the coastline.

Among the numerous advantages of this technology is the lower environmental impact associated with the manufacture and installation of floating platforms. These turbines can be constructed and assembled on land before being towed to their designated offshore sites. Advanced engineering designs allow these turbines to be anchored in deeper waters, capitalising on consistently higher wind speeds which translate into significant energy output and potentially reduced levelised costs of electricity (LCOE).

Key factors driving this market include the rapid technological advancements in floating turbine design and construction. Platforms such as spar-buoy, semi-submersible, and tension-leg have been engineered to thrive in the harsh and turbulent deepwater marine environments. The semi-submersible foundation, in particular, is set to dominate the market due to its adaptability to varying depths and seabed conditions, alongside a stable operational platform even amidst the most challenging marine conditions.

Government policies and green energy initiatives play a crucial role in promoting the floating wind turbine market. Various nations are implementing supportive regulations, financial incentives, and removing regulatory barriers to expedite the adoption of floating wind technology. For instance, the European Union's Green Deal articulates offshore wind energy as integral to meeting carbon neutrality targets by 2050, with the United States pursuing similar initiatives to accelerate renewable energy development via the Inflation Reduction Act.

Despite the promising outlook, challenges remain, particularly with the high initial investments required for project development and installation. Floating wind systems demand advanced technology and infrastructure not needed by traditional fixed-bottom turbines. These include dynamic cabling systems and robust mooring systems, all necessary for efficient operation in deep waters, which introduces significant financial risk for developers. Furthermore, emerging markets are increasingly recognised for their potential contribution to the floating wind turbine landscape, particularly in regions such as Japan, South Korea, India, and Brazil, where energy demands are on the rise due to industrialisation and urbanisation.

The report also highlights a significant shift towards larger turbine capacities, with turbines featuring capacities above 5 megawatts capturing substantial market share. This trend is influenced by the industry's focus on maximising energy production efficiency, enhancing the performance of offshore wind farms and supporting sustainability goals.

As the industry progresses, the competitive landscape features key players such as General Electric, Siemens, and Vestas, amongst others, actively promoting innovations and strategies to ensure the successful deployment of floating wind technologies globally. In summary, the floating wind turbine market is on a trajectory of rapid growth, buoyed by technological innovation, government support, and the pressing global need for renewable energy.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.precedenceresearch.com/floating-wind-power-market> - Corroborates the projected growth of the floating wind power market, including the market size and CAGR from 2023 to 2032, and the impact of COVID-19 on the market.
* <https://www.gminsights.com/industry-analysis/floating-offshore-wind-energy-market> - Supports the growth projections and CAGR of the floating offshore wind energy market, as well as the advantages of floating wind turbines in deeper waters and the integration with energy storage systems.
* <https://www.marketresearchfuture.com/reports/floating-wind-turbine-market-10051> - Provides details on the market size and growth projections of the floating wind turbine market, including the different types of foundations and regional market forecasts.
* <https://www.precedenceresearch.com/floating-wind-power-market> - Explains the benefits of floating wind turbines, such as lower environmental impact, and the potential for deployment in deep waters where traditional fixed-bottom turbines are not feasible.
* <https://www.gminsights.com/industry-analysis/floating-offshore-wind-energy-market> - Highlights the technological advancements in floating turbine design and construction, including platforms like spar-buoy, semi-submersible, and tension-leg foundations.
* <https://www.precedenceresearch.com/floating-wind-power-market> - Discusses government policies and green energy initiatives supporting the floating wind turbine market, such as targets set by Japan and the UK.
* <https://www.gminsights.com/industry-analysis/floating-offshore-wind-energy-market> - Mentions the role of government regulations and incentives in promoting the adoption of floating wind technology, particularly in regions like North America.
* <https://www.marketresearchfuture.com/reports/floating-wind-turbine-market-10051> - Addresses the challenges associated with high initial investments and the need for advanced technology and infrastructure for floating wind systems.
* <https://www.precedenceresearch.com/floating-wind-power-market> - Notes the emerging markets in regions such as Japan, the UK, and the United States, and their potential contribution to the floating wind turbine landscape.
* <https://www.gminsights.com/industry-analysis/floating-offshore-wind-energy-market> - Highlights the trend towards larger turbine capacities and the focus on maximizing energy production efficiency and supporting sustainability goals.
* <https://www.marketresearchfuture.com/reports/floating-wind-turbine-market-10051> - Mentions key players in the industry, such as General Electric, Siemens, and Vestas, and their role in promoting innovations and strategies for floating wind technologies.
* <https://news.google.com/rss/articles/CBMiogJBVV95cUxPMzRTWl9wOGtMSmdIQUc5MGVyVFAtSThwMmE0UVhncGxQc2gwb1Ffc21maWtXSW50R19mUEVQTTA5TG1hWkpRc0lpblVSbTVyay1aejgySDdUNnAyS1BfaWVVUHZRa1J2bURrMG5Bc2VDZGlub3VqNE0wdTVpdG9DTjAyelphWXBMNUk2VlFPT3lGX2hhRF9sX1NIOFFiSldGX2NOc1dTS3VZMXF6Y3dCOTd1YnhJOG85VFAycDVrZEh4ZVdKMHNJd3VYbjZaRUFRRzRtV09sbkYySjlpZkdEZC0yd3BuWU5WUjJaN2hmT2N4VkgxZkxkTlRnREhEVG1nZlY5cHBFaE1zOGtHZldJWjJyMlhzeWZqTVRxWTRMNnVoUQ?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data