

Wind Turbine - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

<https://marketpublishers.com/r/W9D2A3C52B77EN.html>

Date: July 2024

Pages: 125

Price: US\$ 4,750.00 (Single User License)

ID: W9D2A3C52B77EN

Abstracts

The Wind Turbine Market size is estimated at 145.66 gigawatt in 2024, and is expected to reach 955.08 gigawatt by 2029, growing at a CAGR of 45.66% during the forecast period (2024-2029).

Key Highlights

Over the medium period, factors such as increasing demand for renewable energy sources, especially wind power, in the power generation mix, efforts to reduce the reliance on fossil fuel-based power generation, and regulations on energy efficiency are expected to drive the wind turbine market.

On the other hand, the adoption of alternative clean energy sources like solar and other alternatives is likely to hinder the market's growth.

The Global Wind Energy Council committed to achieving 380 GW of offshore wind by 2030 and 2,000 GW by 2050 worldwide, which is likely to provide significant opportunities for the deployment of wind turbines soon.

Asia-Pacific is expected to be the largest and fastest-growing market, owing to the largest share in terms of wind power generation and the presence of manufacturing and technology hubs in countries like China, India, Japan, etc.

Wind Turbine Market Trends

Offshore Wind Turbine to Witness Significant Growth

As energy demand is rising, major countries and companies are turning toward the adoption of renewable energy sources, especially wind energy, as they can provide clean energy. The adoption of offshore wind energy with advanced technologies has attracted many countries and companies with high investments.

By location of deployment, the offshore industry is expected to witness significant growth in global wind turbine industry investments during the forecast period, owing to declining costs, improved technology, and increased developments and investments in offshore wind energy projects worldwide.

To significantly increase the affordable energy supply in the United Kingdom while reducing carbon emissions, the UK government developed a long-term strategy to deliver at least one-third of its electricity from offshore wind as part of a sector deal between the offshore wind industry and the government. A report by the UK's Committee on Climate Change indicates the country could become the first large economy to legislate a "net zero" emissions target for 2050.

Further, global wind companies are making efforts to ease the supply chain for the offshore wind industry. In April 2024, Vestas made a Memorandum of A.P. Moller-Maersk, Jeonnam Province, and Mokpo City, discussing a supply chain investment in Mokpo City, Jeonnam Province, for the development of the offshore wind energy industry in South Korea.

Following the Renewable Energy Act (EEG), Germany plans to boost offshore wind energy massively. As part of the Coalition Agreement, Germany stated it would increase its offshore wind target to 30 GW by 2030.

According to GWEC (Global Wind Energy Council) statistics, the global offshore wind capacity reached 75 GW in 2023, and 10.8 GW of capacity was added in 2023.

Besides this, the companies have been able to install taller wind turbines due to improvements in the wind turbine materials used, which allow the turbines to exploit higher-altitude winds. These new turbines have larger blades and, hence, can sweep a larger area than the smaller turbines. The growing size of wind turbines helped lower the cost of wind energy, indicating that it is economically competitive with fossil fuel alternatives in some locations, such as the United States, Germany, France, etc. Such recent trends are expected to drive the offshore wind turbine market during the forecast period.

Asia-Pacific to Dominate the Market

In Asia-Pacific, wind energy is one of the most abundant energy resources, making it an ideal source for fulfilling the region's energy needs. In view of wind energy's tremendous growth potential, Asian countries, including China, India, Japan, and others, are currently focusing on implementing a widespread deployment of this energy resource.

As a result of an increasing focus on sustainable development and a commitment to reducing greenhouse gas emissions, offshore wind energy has become a popular source of energy. As a mainstream energy source for power generation, offshore wind energy has significantly changed from being a source of alternative energy. Offshore wind energy technology is being developed at a rapid pace in Asian countries, which has contributed to the growing reliance on wind energy due to recent advancements in turbine technology and government incentives.

According to GWEC, the global offshore wind industry installed a new capacity of approximately 11 GW in 2023. Furthermore, 69.3 GW of onshore wind capacity was installed in 2023 in China, consecutively leading the world in new installations, with more than 6.3 GW of offshore wind grids connected in 2023, accounting for 58% of the total new installation in offshore wind.

During 2023, India installed around 2.8 GW of new wind power, making 44.7 GW of total installed capacity by the end of the same year. These projects are mostly spread in the northern, southern, and western parts of the country.

In March 2024, Solar Energy Corporation of India announced a plan to issue a tender for offshore wind project development by next year for a total capacity of 1,000 megawatts (MW). The tender includes 500-MW capacity each for setting up offshore wind energy projects off the coast of Tamil Nadu and Gujrat.

According to the World Bank Group, the Philippines' EEZ has around 178 GW of technical resource potential for offshore wind, primarily floating wind, with 18 GW of fixed-bottom offshore wind. Considering that this is more than seven times the country's total installed electricity generation capacity, the opportunity to meet decarbonization and energy security goals is significant.

In partnership with the World Bank Group's ESMAP-IFC Offshore Wind Development

Program, the Philippine Department of Energy is developing an offshore wind roadmap. A draft roadmap identifies six different zones for offshore wind development, totaling 2.8 GW by 2030 and 58 GW by 2050, with mostly floating offshore wind projects.

These factors are expected to present Asia-Pacific as an excellent business destination for market players involved in the wind turbine business during the forecast period.

Wind Turbine Industry Overview

The wind turbine market is moderately fragmented. Some of the major players in the market (in no particular order) include Vestas Wind Systems AS, Siemens Gamesa Renewable Energy SA, General Electric Company, Nordex SE, and Suzlon Energy Limited, among others.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

Contents

1 INTRODUCTION

- 1.1 Scope of the Study
- 1.2 Market Definition
- 1.3 Study Assumptions

2 EXECUTIVE SUMMARY

3 RESEARCH METHODOLOGY

4 MARKET OVERVIEW

- 4.1 Introduction
- 4.2 Wind Turbine Installed Capacity and Forecast in GW, till 2029
- 4.3 Recent Trends and Developments
- 4.4 Government Policies and Regulations
- 4.5 Market Dynamics
 - 4.5.1 Market Drivers
 - 4.5.1.1 Increasing Demand for Renewable Energy Sources
 - 4.5.1.2 Efforts to Reduce the Reliance on Fossil Fuel-Based Power Generation
 - 4.5.2 Market Restraints
 - 4.5.2.1 The Adoption of Alternative Clean Energy Sources
- 4.6 Supply Chain Analysis
- 4.7 Porter's Five Forces Analysis
 - 4.7.1 Bargaining Power of Suppliers
 - 4.7.2 Bargaining Power of Consumers
 - 4.7.3 Threat of New Entrants
 - 4.7.4 Threat of Substitute Products and Services
 - 4.7.5 Intensity of Competitive Rivalry

5 MARKET SEGMENTATION

- 5.1 Location of Deployment
 - 5.1.1 Onshore
 - 5.1.2 Offshore
- 5.2 Capacity
 - 5.2.1 Small

5.2.2 Medium

5.2.3 Large

5.3 Geography

5.3.1 North America

5.3.1.1 United States

5.3.1.2 Canada

5.3.1.3 Rest of the North America

5.3.2 Europe

5.3.2.1 Germany

5.3.2.2 United Kingdom

5.3.2.3 France

5.3.2.4 Spain

5.3.2.5 Russia

5.3.2.6 NORDIC

5.3.2.7 Italy

5.3.2.8 Turkey

5.3.2.9 Rest of the Europe

5.3.3 Asia-Pacific

5.3.3.1 China

5.3.3.2 India

5.3.3.3 Japan

5.3.3.4 Australia

5.3.3.5 Thailand

5.3.3.6 Vietnam

5.3.3.7 Malaysia

5.3.3.8 Indonesia

5.3.3.9 Rest of the Asia-Pacific

5.3.4 South America

5.3.4.1 Brazil

5.3.4.2 Argentina

5.3.4.3 Colombia

5.3.4.4 Rest of the South America

5.3.5 Middle East and Africa

5.3.5.1 United Arab Emirates

5.3.5.2 Saudi Arabia

5.3.5.3 South Africa

5.3.5.4 Egypt

5.3.5.5 Qatar

5.3.5.6 Nigeria

5.3.5.7 Rest of the Middle East and Africa

6 COMPETITIVE LANDSCAPE

6.1 Mergers and Acquisitions, Joint Ventures, Collaborations, and Agreements

6.2 Strategies Adopted by Leading Players

6.3 Company Profiles

6.3.1 Vestas Wind Systems AS

6.3.2 Siemens Gamesa Renewable Energy SA

6.3.3 General Electric Company

6.3.4 Nordex SE

6.3.5 Suzlon Energy Limited

6.3.6 Xinjiang Goldwind Science & Technology Co. Ltd

6.3.7 Eaton Corporation PLC

6.3.8 Enercon GmbH

6.3.9 Hitachi Ltd.

6.3.10 Vergnet

6.4 Market Ranking/Share (%) Analysis

7 MARKET OPPORTUNITIES AND FUTURE TRENDS

7.1 Supporting Aim of Global Wind Energy Council for Upcoming Installation

I would like to order

Product name: Wind Turbine - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

Product link: <https://marketpublishers.com/r/W9D2A3C52B77EN.html>

Price: US\$ 4,750.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/W9D2A3C52B77EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

