

# Analyzing the Global Market for Wind Turbine Generators

<https://marketpublishers.com/r/A7E3D108A27EN.html>

Date: November 2015

Pages: 175

Price: US\$ 1,250.00 (Single User License)

ID: A7E3D108A27EN

## Abstracts

The wind turbine generator or WTG is responsible for converting the mechanical energy into electrical energy in a wind turbine. The wind turbine generator works in combination with the power source of the wind turbine that is the wind turbine rotor. There are many different types of generators that can be used in a wind turbine. However, at the moment, three major types are generally used. These are the induction generator, permanent magnet alternators or Permanent Magnet Synchronous Generators (PMSG) and brushed DC motor. Brushed DC motors are usually put into use in home built wind turbines.

The global market for wind turbine generators has always been growing at a good rate with production primarily being concentrated in the regions of Europe and Asia Pacific. Some of the leading manufacturers of wind turbine generators in the global market include ABB, Siemens, Elin, Enercon, Gamesa and others.

Aruvian Research analyzes the global market for wind turbine generators in its research offering Analyzing the Global Market for Wind Turbine Generators. The report is a comprehensive coverage of the industry starting from the year 2006 till 2020.

Divided into 5 sections, the report begins with an analysis of the global wind power industry and provides an analysis of what is the situation like in the global wind energy market. Beginning with an analysis of the wind power technology and an analysis of market statistics in the global wind energy industry, the industry is analyzed through the regions of Africa and the Middle East, Asia, Europe, North America, South & Latin America, and the Pacific Region. Wind power in the European Union is also analyzed along with a profile of the global offshore wind market.

Section 2 of the report analyzes the global wind turbine industry and looks at global installation statistics of wind turbines, market size, cost of turbines and other factors.

Section 3 is the main section analyzing the global market for wind turbine generators. Beginning with an overview of what are wind turbine generators, we also analyze the various types of generators available for use in wind turbines.

The market for wind turbine generators is analyzed through industry statistics, production statistics, industry size and cost analysis of wind turbine generators.

Industry trends and competitive landscape of the sector is also looked at in this report.

An analysis of the major industry players involved in the manufacturing of wind turbine generators such as ABB Ltd, China Ming Yang Wind Power Group, Enercon, Siemens, ELIN Motoren, Leroy-Somer Holding, and others is included in the report. Each player is analyzed through a corporate profile/snapshot, a business segment analysis, a financial analysis and a SWOT analysis.

## Contents

### EXECUTIVE SUMMARY

### SECTION 1: GLOBAL WIND POWER INDUSTRY

#### A. INTRODUCTION TO WIND POWER

- A.1 How do Wind Turbines Work?
- A.2 Wind Power Technology
- A.3 Power Generation from Wind

#### B. WIND POWER TECHNOLOGY

- B.1 Introduction
- B.2 Types of Turbines
- B.3 Airborne Wind Turbine
- B.4 Wind Turbine's Power Output
- B.5 Cost of a Wind Turbine
- B.6 Turbine Size
- B.7 Efficiency Factors
- B.8 Offshore Wind Turbines
- B.9 Lifetime of a Turbine
- B.10 Globalization Impacting the Wind Turbine Market

#### C. ANALYZING THE GLOBAL WIND ENERGY INDUSTRY

- C.1 Market Profile
- C.2 Market Statistics
- C.3 Market Analysis by Region
  - C.3.1 Africa & the Middle East
  - C.3.2 Asia
  - C.3.3 Europe
  - C.3.4 North America
  - C.3.5 South & Latin America
  - C.3.6 Pacific Region
- C.4 Wind Power in the European Union (EU)
  - C.4.1 Overview
  - C.4.2 Offshore Wind Market

- C.4.3 Market Trends
- C.4.4 Regulatory Framework
- C.5 Global Offshore Wind Market
  - C.5.1 Overview
  - C.5.2 Asia
  - C.5.3 Europe
  - C.5.4 United States

## **SECTION 2: GLOBAL WIND TURBINE INDUSTRY**

### **A. INTRODUCTION TO WIND TURBINES**

- A.1 Components of Wind Turbines
- A.2 Global Installations of Wind Turbines
- A.3 Market Size
- A.4 Cost of Turbines
- A.5 Average Turbine Size
- A.6 Market Share

## **SECTION 3: ANALYZING THE GLOBAL MARKET FOR WIND TURBINE GENERATORS**

### **A. INTRODUCTION**

- A.1 Overview of Wind Turbine Generators
- A.2 Types of Generators used for Wind Turbines
  - A.2.1 Induction Generator
  - A.2.2 Permanent Magnet Alternators
  - A.2.3 Brushed DC Motor

### **B. MARKET FOR WIND TURBINE GENERATORS**

- B.1 Industry Overview
- B.2 Production Statistics
- B.3 Industry Size
- B.4 Cost of Wind Turbine Generators

### **C. INDUSTRY TRENDS**

## **D. COMPETITION IN THE INDUSTRY**

### **SECTION 4: ANALYSIS OF MAJOR MANUFACTURERS OF WIND TURBINE GENERATORS**

#### **A. ABB LTD.**

- A.1 Corporate Profile
- A.2 Business Segment Analysis
- A.3 Financial Analysis
- A.4 SWOT Analysis

#### **B. CHINA MING YANG WIND POWER GROUP LTD**

- B.1 Corporate Profile
- B.2 Business Segment Analysis
- B.3 Financial Analysis
- B.4 SWOT Analysis

#### **C. ELIN MOTOREN**

- C.1 Corporate Profile
- C.2 Business Segment Analysis
- C.3 Financial Analysis
- C.4 SWOT Analysis

#### **D. ENERCON**

- D.1 Corporate Profile
- D.2 Business Segment Analysis
- D.3 Financial Analysis
- D.4 SWOT Analysis

#### **E. GAMESA CORPORACION TECNOLOGICA SA**

- E.1 Corporate Profile
- E.2 Business Segment Analysis
- E.3 Financial Analysis
- E.4 SWOT Analysis

## **F. SIEMENS AG**

- F.1 Corporate Profile
- F.2 Business Segment Analysis
- F.3 Financial Analysis
- F.4 SWOT Analysis

## **G. VESTAS WIND SYSTEMS A/S**

- G.1 Corporate Profile
- G.2 Business Segment Analysis
- G.3 Financial Analysis
- G.4 SWOT Analysis

## **H. WINERGY AG**

- H.1 Corporate Profile
- H.2 Business Segment Analysis
- H.3 Financial Analysis
- H.4 SWOT Analysis

## **I. LEROY-SOMER HOLDING**

## **J. XINJIANG GOLDWIND**

## **K. YONGJI XINSHISU ELECTRIC EQUIPMENT CO., LTD**

## **SECTION 5: CONCLUSION**

## **A. APPENDIX**

## **B. GLOSSARY OF TERMS**

## List Of Figures

### LIST OF FIGURES

- Figure 1: Power Curve for Wind Turbine
- Figure 2: Energy Produced at Various Wind Speeds at Typical Wind Farm Site
- Figure 3: Energy Produced at Various Wind Speeds at Typical Site
- Figure 4: Capacity Factor in % of Rated Power
- Figure 5: Aerodynamics of Wind Power
- Figure 6: Components in a Simplified Wind Turbine
- Figure 7: Airborne Wind Generator
- Figure 8: Main Components of a Wind Turbine and their Share of the Overall Turbine Cost for a 5 MW Wind Turbine
- Figure 9: Turbine Diameter Growth with Time
- Figure 10: Growth in Size of Commercial Wind Turbine Designs
- Figure 11: Development of the Average Wind Turbine Size Sold in Different Countries (in KW)
- Figure 12: Increase in Turbine Prices from 2012 to 2014
- Figure 13: Top 10 Cumulative Capacity as of Dec 2014
- Figure 14: Top 10 New Installed Capacity Jan-Dec 2014
- Figure 15: Global Annual Installed Wind Capacity 1997-2014
- Figure 16: Global Cumulative Installed Wind Capacity 1997-2014
- Figure 17: Annual Installed Capacity by Region 2006-2014
- Figure 18: Share of New Wind Power Installations in the EU (in MW), 2014
- Figure 19: Total Installed Capacity in the European Union (in MW), 2001-2014
- Figure 20: Electricity Generating Installations in the EU (in GW), 2000-2014
- Figure 21: Annual Offshore Wind Capacity Installations in Europe in 2014 (in MW)
- Figure 22: Share of Wind Turbine Manufacturers' at end of 2014 (in MW)
- Figure 23: Components of a Wind Turbine
- Figure 24: Global Annual Wind Power Installations (in GW), 2006-2015
- Figure 25: Global Turbine Market Size (in USD Billion) & Average Turbine Cost (in USD per kW), 2006-2015
- Figure 26: Average Capacity of a Wind Turbine, Offshore and Onshore Turbines (in MW), 2006-2020
- Figure 27: Major Players in the Global Turbine Industry & their Market Share (%), 2014
- Figure 28: Yearly Variation of Market Shares of Major Wind Turbine Suppliers (%), 2007-2014
- Figure 29: Global Production of Wind Turbine Generators (in GW), 2006-2014
- Figure 30: Size of the Wind Turbine Generator Market (in USD Billion), 2006-2020

- Figure 31: Cost of the Wind Turbine Generators (in USD per kW), 2006-2020
- Figure 32: Major Players in the Global Wind Turbine Generator Market & their Market Share (%), 2014
- Figure 34: General Layout for a Wind Turbine System
- Figure 35: An Offshore Wind Farm
- Figure 35: Overall Wind Farm Costs
- Figure 37: Total Renewables Cost Envelope vs. Coal, Gas & Nuclear Cost
- Figure 38: Combustion Emissions from Electricity Generation 2005-2050
- Figure 39: Low Emission Generation Requirements



## List Of Tables

### LIST OF TABLES

Table 1: Four Optional Installation Systems for Offshore Wind Power

Table 2: Global Installed Wind Power Capacity (MW) by Regions, 2013-2014

Table 3: Upcoming Offshore Wind Power Projects in Japan

Table 4: Wind Farms and Turbines Connected to the Grid at end of 2014 in Europe

Table 5: Global Annual Wind Power Installations (in GW), 2006-2015

Table 6: Global Turbine Market Size (in USD Billion) & Average Turbine Cost (in USD per kW), 2006-2015

Table 7: Average Capacity of a Wind Turbine, Offshore and Onshore Turbines (in MW), 2006-2020

Table 8: Yearly Variation of Market Shares of Major Wind Turbine Suppliers (%), 2007-2014

Table 9: Global Production of Wind Turbine Generators (in GW), 2006-2014

Table 10: Size of the Wind Turbine Generator Market (in USD Billion), 2006-2020

Table 11: Cost of the Wind Turbine Generators (in USD per kW), 2006-2020

Table 12: Major Players in the Global Wind Turbine Generator Market & their Market Share (%), 2014

Table 13: Major Turbines Developed by Enercon

## I would like to order

Product name: Analyzing the Global Market for Wind Turbine Generators

Product link: <https://marketpublishers.com/r/A7E3D108A27EN.html>

Price: US\$ 1,250.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/A7E3D108A27EN.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