

# **Growth Opportunities in Chinese Wind Energy Market:** 2011-2016 Trends, Forecast and Opportunity Analysis, April 2011

https://marketpublishers.com/r/GB98D39CA33EN.html

Date: April 2011

Pages: 117

Price: US\$ 3,300.00 (Single User License)

ID: GB98D39CA33EN

## **Abstracts**

### **Background:**

China's wind energy market has grown rapidly during the last five years and is expected to reach 158 GW by 2016 with a CAGR of 20% over the next five years. Various factors are expected to drive the wind energy market in China. Government backing and generation-based incentives for renewable energy sources, rising electricity demand, and Clean Development Mechanism support from the UN all are expected to boost China's wind market. Lucintel, a leading global management consulting and market research firm, has analyzed the Chinese wind energy market and makes its findings available through a comprehensive research report, "Growth Opportunities in Chinese Wind Energy Market 2011-2016." The rapid pace of wind energy holds immense opportunities for various stakeholders in China. China outpaced the US and emerged as the biggest market for wind power capacity in 2010. China has approximately 44.7 GW of installed wind power capacity and intends to reach 230 GW by 2020.

Wind turbine blades are mostly made of composites because of the excellent mechanical properties and ease of designing. Composites consumption in the Chinese wind market was approximately 488 million pounds in 2010. Lucintel estimates that composites consumption is will reach 542 million pounds by 2016.

The wind MRO market closely follows the growth of the wind energy market. China's market for MRO services was an estimated \$683 million in 2010. Based on Lucintel's analysis, it determined that the rising popularity of wind energy (increases in installation and operational costs) and larger turbine sizes (specific MRO techniques needed) will



drive the future cost of MRO services.

This Lucintel research report provides insights regarding recent industry trends, and future opportunities and threats. In addition, the report addresses the market share of major players, supply chain analysis, composites consumption, and MRO activities in China's wind energy market.

This unique report from Lucintel will provide you with valuable information, insights and tools needed to identify new growth opportunities and operate your business successfully in this market. This report will save hundreds of hours of your own personal research time and will significantly benefit you in expanding your business in this market. In today's stringent economy, you need every advantage that you can find to keep ahead in your business. Features of This Report:

To make business, investment, or strategic decisions, you need timely and adequate information. This market report fulfills this core need and is an indispensable reference guide for multi-national material suppliers, product manufacturers, investors, executives, distributors and many more, who are dealing with the Chinese wind market.

Some of the features of "Growth Opportunities in Chinese Wind Energy Market: 2011-2016 Trends, Forecast and Opportunity Analysis" are:

Trend & forecast in terms of MW installation in different categories of turbine

Composite consumption (M lbs) trend & forecast in wind sector of China

Total MW Potential in different wind speed classes

Current penetration & opportunity in Chinese wind market

Market share of major players

MRO cost trend for Chinese wind energy market

Turbine OEMs description has been provided in this report

Supply chain for turbine manufacturing

Growth opportunities in Chinese wind market



## **Research Methodology:**

Lucintel has closely tracked and conducted research on composites and other markets since 1998. This research project was designed for the purposes of determining the OEMs, Tier 1 and few Tear 2 players as they are expected to identify the opportunity in Chinese wind industry and the likely demand in wind market in near future. Comprehensive market analysis, trend, and forecast data is estimated to help make any investment, business or strategic decisions.

This study is a culmination of eight months of full-time effort performed by Lucintel's analyst team.

Our analysts used the following sources for the creation and completion of this valuable report:

In-depth secondary research and telephone interviews with more 35 major OEMs, and Tier 1 players

In-depth research on more than 15 companies involved in the wind market

Thorough secondary research from financial statements and annual reports of the competitors



## **Contents**

#### 1. EXECUTIVE SUMMARY

- 1.1: Chinese wind energy market
- 1.2: Porter's Five Forces analysis of Chinese wind turbine market
  - 1.2.1: Porter's Five Forces for wind turbine market of China

#### 2. OVERVIEW OF THE CHINESE WIND INDUSTRY

- 2.1: Current wind market of china
- 2.2: The Chinese renewable energy law
  - 2.2.1: Renewable energy law 2009 amendments
  - 2.2.2: The renewable energy premium
  - 2.3.3: Feed-In-Tariff regulation

#### 3. CHINESE WIND ENERGY MARKET ANALYSIS

- 3.1: Product mapping for wind turbine manufacturers in China, 2010
- 3.2: Competitive analysis of OEMs for 2010
  - 3.2.1: Foreign vs. domestic turbine manufactures
- 3.3: Supply Chain analysis for 2010
  - 3.3.1: Key suppliers of wind turbine components in China
  - 3.3.2: Wind supply Chain of major OEMs
  - 3.3.3: Domestic vs. international sourcing of components in China
- 3.4: Market share and market consolidation analysis for 2010
- 3.5: Turbine size breakdown and market demand for low (1.5 MW) turbines in 2010
- 3.6: Composites market analysis 2010

#### 4. CHINESE WIND ENERGY MARKET TRENDS (2005-2010)

- 4.1: Wind energy installation trends (2005-2010)
- 4.1.1: Comparative study of MWs installed in 2005 & 2010
- 4.2: China wind turbine market size trend (2005-2010)
- 4.3: Installation trends of Low, Medium & High MW wind turbines (2005-2010)
- 4.4: Composites consumption trend (2005-2010)
  - 4.4.1: Comparative study of composites consumption (2005 & 2010) in wind market

## 5. CHINESE WIND ENERGY MARKET FORECASTS (2011-2016)



- 5.1: Wind energy installation forecast (2011-2016)
  - 5.1.1: Comparison between yearly MW installations in 2011 & 2016
- 5.2: Low, Medium & High MW wind turbine installations (2011-2016)
  - 5.2.1: Comparison between Turbine sizes of 2011 & 2016
- 5.3: Composites consumption forecast 2011-2016
  - 5.3.1: Comparative study of composites consumption (2011 & 2016) in wind market
- 5.4: Growth drivers
- 5.5: Growth challenges

#### 6. COMPETITORS' PROFILE

- 6.1: Sinovel Wind Group Co., Ltd
- 6.2: Xinjiang Goldwind Science & Technology Co., Ltd.
- 6.3: Dongfang Electric

#### 7. CURRENT MRO MARKET OF CHINA

- 7.1: MRO market of China 2010 component wise MRO
  - 7.1.1: Gearbox MRO
  - 7.1.2: Generator MRO
  - 7.1.3: Blade MRO
  - 7.1.4: Component's down time & failure frequency
- 7.2: Chinese MRO market trend (2005 2010)
- 7.2.1: Comparison between wind MRO markets of 2005 & 2010

#### 8. GROWTH OPPORTUNITIES IN CHINESE WIND MARKET

- 8.1: Opportunities in Chinese wind market
  - 8.1.1: Wind power installation in different states
  - 8.1.2: Wind potential distribution in different wind classes
  - 8.1.3: Opportunity in China wind power market



# **List Of Figures**

#### LIST OF FIGURES

	н	Δ	D		D,	1
U		$\boldsymbol{\neg}$		_	1/	Ι.

Figure 1.1: Porter's Five Forces model for the Chinese wind turbine market

CHAPTER 3.

Figure 3.1: Market share of major players in 2010

Figure 3.2: Annual market share of domestic and foreign players in China

CHAPTER 4.

Figure 4.1: Annual wind power installations in China (MW)

Figure 4.2: Cumulative wind power installations in China (MW)

Figure 4.3: Wind turbine market size trend in China (MW)

Figure 4.4: Installation trends of high, medium, and low MW wind turbines

Figure 4.5: Average size turbine trend (MW)

Figure 4.6: Annual composites consumption trend in turbines (M lbs.)

CHAPTER 5.

Figure 5.1: Yearly forecast for wind power installations in China (MW)

Figure 5.2: Cumulative wind power installation forecast in China (MW)

Figure 5.3: High, medium, and low MW wind turbine installations forecast (2011?2016)

Figure 5.4: Annual composites consumption forecast in turbines (M lbs.)

CHAPTER 7.

Figure 7.1: Severe wear in bearing

Figure 7.2: Worn-out planet bearing

Figure 7.3: Girding temper

Figure 7.4: Broken tooth

Figure 7.5: Manufacturing failure in blade

Figure 7.6: Large repair in blade roots

Figure 7.7: Scaling of top coat

Figure 7.8: Damage from lightning strike in blade

Figure 7.9: Cracks in trailing edge

Figure 7.10: Skins delaminated from the spars

Figure 7.11: Annual failure frequency, average downtime of main wind turbine

components

Figure 7.12: MRO market trends of China 2005?2010 (US \$M)

CHAPTER 8.

Figure 8.1: Current installations and opportunities in onshore Chinese wind market

Figure 8.2: Wind power installation in different states

Figure 8.3: Potential distribution according to different wind classes



Figure 8.4: 2016 opportunity analysis of the top wind states in China

Figure 8.5: Top wind power installation states in China



## **List Of Tables**

#### LIST OF TABLES

#### CHAPTER 1.

- Table 1.1: Overview of the Chinese wind market
- Table 1.2: Market parameters for the Chinese wind MRO market users
- Table 1.3: Market parameters and attributes for composites in the Chinese wind market CHAPTER 3.
- Table 3.1: Product mapping of wind turbine manufacturers
- Table 3.2: Key suppliers of wind turbine components in China
- Table 3.3: Wind supply chain for top OEMs in China
- Table 3.4: Domestic versus international sourcing of components in China
- Table 3.5: Turbine size breakdown for 2010

#### CHAPTER 4.

- Table 4.1: Growth trends (2005?2010) for new and cumulative installations
- Table 4.2: Chinese annual nominal wind power installation growth rates (CAGR) for the last one, three, and five years
- Table 4.3: Installation trends of different size turbines in % share of MW installed
- Table 4.4: Comparison of annual nominal growth rates (CAGR) of low MW (smaller than
- 1.5 MW), Medium MW (1.5 MW), High MW (larger than 1.5 MW) wind turbine installation in China for the last one, three, and five years (2005-2010)
- Table 4.5: Composites consumption trend in Chinese wind sector (2005?2010)
- Table 4.6: Chinese annual nominal composites consumption growth rate (CAGR) for the last one, three, and five years

#### CHAPTER 5.

- Table 5.1: Growth forecast (2011?2016) for new and cumulative capacity
- Table 5.2: Forecast for Chinese annual wind power installation growth rates (CAGR)
- Table 5.3: Installation forecast for different size turbines in % share of MW installed
- Table 5.4: Comparison of expected annual nominal growth rates (CAGR) of low MW (smaller than 1.5 MW), Medium MW (1.5 MW), High MW (larger than 1.5 MW) wind turbine installation in China for the last one, three, and five years (2011-2016)
- Table 5.5: Composites consumption forecast in wind sector of China (2011?2016)
- Table 5.6: Forecast for Chinese annual composites consumption growth rates (CAGR) CHAPTER 7.
- Table 7.1: Chinese MRO market trend 2005?2010 (US \$M)
- Table 7.2: Chinese MRO market trend (2005?2010)
- Table 7.3: Chinese annual nominal MRO market growth rates (CAGR) for the last one, three, and five years



## I would like to order

Product name: Growth Opportunities in Chinese Wind Energy Market: 2011-2016 Trends, Forecast and

Opportunity Analysis, April 2011

Product link: https://marketpublishers.com/r/GB98D39CA33EN.html

Price: US\$ 3,300.00 (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 <a href="https://marketpublishers.com/r/GB98D39CA33EN.html">https://marketpublishers.com/r/GB98D39CA33EN.html</a>