

China: Investment report to 2015

China is now one of the world's fastest growing markets for wind power and is on course to become the biggest of all. This extensive investment report provides reliable, robust estimates of likely developments in China's wind power industry over the next five years to 2015. The report's quantitative growth forecasts are provided in a highly granular format enabling businesses to identify specific opportunities in China. These include: regional forecasts, equipment and turbine size forecasts, onshore/offshore growth forecasts and market share analysis. Research was carried out within government at both national and provincial level to understand future policy changes. With over 200 tables and figures this report is the most comprehensive piece of primary research ever assembled on the Chinese wind market.

REPORT CONTENTS

Source and methodology

Time and scope of data

Report scope

Objective

Methodology

Definitions

Chapter 1

1.1 Wind Resources

- 1.1.1 Profile of wind resources
- 1.1.2 Distribution of wind resources by province

1.2 Market development

1.3 Factors influencing the wind power industry

- 1.3.1 Electricity demand
- 1.3.2 Government policies
 - 1.3.2.1 Renewable energy policy
 - 1.3.2.2 Domestic climate policy
 - 1.3.2.3 Feed-in tariff and other financial incentives
- 1.3.3 The cost increase of coal use and growing environmental concern
- 1.3.4 Technology transfer and absorption
- 1.3.5 Planning
- 1.3.6 Public opinion
- 1.3.7 Competition among provinces
- 1.3.8 Clean Development Mechanism Effect
- 1.3.9 Grid capacity
- 1.3.10 Low capacity in Operation and Maintenance

1.4 Forecasts 2010-2015

- 1.4.1 Forecast for wind power market
- 1.4.2 Large MW-class wind turbine will dominate in the future
- 1.4.3 Wind farms will get bigger both in the size of wind turbine and the total capacity
- 1.4.4 Six Great Wind Power Bases

Chapter 2: Wind power development in provinces

2.1 INNER MONGOLIA

- 2.1.1 Overview
- 2.1.2 Wind farm developers
- 2.1.4 Major Pipeline projects

2.2 JILIN

- 2.2.1 Overview
- 2.2.2 Wind power developers
- 2.2.3 Wind turbine manufacturers
- 2.2.4 Major Pipeline Projects

2.3 LIAONING

- 2.3.1 Overview
- 2.3.2 Wind power developers
- 2.3.3 Wind turbine manufacturers
- 2.3.4 Major Pipeline Projects

2.4 HEBEI

- 2.4.1 Overview
- 2.4.2 Wind power developers

- 2.4.3 Wind turbine manufacturers
- 2.4.4 Major Pipeline Projects

2.5 HEILONGJIANG

- 2.5.1 Overview
- 2.5.2 Wind power developers
- 2.5.3 Wind turbine manufacturers
- 2.5.4 Major Pipeline Projects

2.6 NINGXIA

- 2.6.1 Overview
- 2.6.2 Wind power developers
- 2.6.3 Wind turbine manufacturers
- 2.6.4 Major Pipeline Projects

2.7 SHANDONG

- 2.7.1 Overview
- 2.7.2 Wind power developers
- 2.7.3 Wind turbine manufacturers
- 2.7.4 Major Pipeline Projects

2.8 GANSU

- 2.8.1 Overview
- 2.8.4 Major Pipeline Projects

2.9 XINJIANG

- 2.9.1 Overview
- 2.9.2 Wind power developers
- 2.9.3 Wind turbine manufacturers

2.10 JIANGSU

- 2.10.1 Overview
- 2.10.2 Wind power developers
- 2.10.4 Major Pipeline Projects

2.11 GUANGDONG

- 2.11.1 Overview
- 2.11.2 Wind power developers
- 2.11.3 Wind turbine manufacturers

2.12 FUJIAN

- 2.12.1 Overview
- 2.12.2 Wind power developers
- 2.12.3 Wind turbine manufacturers
- 2.12.4 Major pipeline projects

2.13 SHANGHAI

- 2.13.1 Overview
- 2.13.2 Wind power developers
- 2.13.3 Wind turbine manufacturers
- 2.13.4 Major pipeline projects

Chapter 3: Major players in wind power market

3.1 Wind turbine manufacturers

- 3.1.1 Overview
- 3.1.2 Major wind turbine manufacturers
 - 3.1.2.1 Sinovel Wind Co. Ltd (Sinovel)
 - 3.1.2.2 Goldwind Science & Technology Co. Ltd (Goldwind)
 - 3.1.2.3 Dongfang Steam Turbine Co. Ltd (DFST)
 - 3.1.2.4 United Power (UP)
 - 3.1.2.5 Guangdong Mingyang Wind Power Industrial Group Co. Ltd (Mingyang)
 - 3.1.2.6 XEMC Windpower Co. Ltd (XEMC)
 - 3.1.2.7 Shanghai Electric (SE or Sewind)
 - 3.1.2.8 Zhejiang Windey Wind Generating Engineering Co. Ltd (Windey)
 - 3.1.2.9 Vestas

- 3.1.2.10 Gamesa Co. Ltd (Gamesa)
- 3.1.2.11 GE Energy Group (GE)
- 3.1.2.12 Suzlon Energy Co. Ltd (Suzlon)

3.2 Wind farm developers

- 3.2.1 Overview
- 3.2.2 Major wind power developers
 - 3.2.2.1 China Longyuan Electric Power Group Corp. (Longyuan)
 - 3.2.2.2 China Datang Corporation (Datang)
 - 3.2.2.3 China Huaneng Group (Huaneng)
 - 3.2.2.4 China Huadian Corporation (Huadian)
 - 3.2.2.5 Guohua Energy Investment Co. Ltd (Guohua)
 - 3.2.2.6 China Guangdong Nuclear Power Group (CGN)
 - 3.2.2.7 Beijing Energy Investment Holding Co. Ltd (Jingneng Group)
 - 3.2.2.8 China Energy Conservation Investment Corporation (CECIC)
 - 3.2.2.9 China Power Investment Corporation (China Power Investment)
- 3.3 Wind service suppliers
- 3.3.1 Overview
- 3.3.2 Major wind power service suppliers in China
 - 3.3.2.1 Xinjiang Wind Energy
 - 3.3.2.2 Xinjiang Jindaban Clean Energy Technology
 - 3.3.2.3 Xinjiang Xinfeng Installation Engineering Co. Ltd (Xinjiang Xinfeng)
 - 3.3.2.9 China 17th Metallurgical Construction Co. Ltd Wind Power Engineering Company (China 17th MCC)
 - 3.3.2.10 China Electric Power Research Institute Renewable Energy3 Department (CEPRIRED)

FOR FURTHER DETAILS CONTACT

Neil Johnston
T: +44(0) 20 8267 4232
F: +44(0) 20 8267 8150
E: neiljohnston@haymarket.com

LIST OF TABLES AND FIGURES

- [Table 1.1 Classification of wind resources]
- [Figure 1.1 Wind resource distribution in China by province]
- [Table 1.2 Top 10 wind power markets by accumulated installed capacity 2007-2009 (MW)]
- [Figure 1.2 Chinese wind power market by accumulated and new installed capacity 2004-2009,(MW)]
- [Table 1.3 Electricity generation by different energy source, 2004-2009]
- [Table 1.4 Annual installed capacity growth of different power sources 2007-2009]
- [Figure 1.3 Structure of the electricity industry by total installed capacity 2009]
- [Figure 1.4 Market price change of wind turbine in China, 2004-2009]
- [Table 1.5 Factors influencing wind power development in China]
- [Figure 1.5 Annual national electricity generation, 2004-2009 (billion kWh)]
- [Table 1.6 Overview of wind power policies in China]
- [Figure 1.6 Four feed-in tariffs and their applicable areas]
- [Table 1.7 Market share of wind turbine manufacturers by new capacity in China, 2007-2009(%)]
- [Table 1.8 Distribution of new and accumulated installed capacity by major provinces, 2009(MW)]
- [Figure 1.7 Forecast for cumulative wind power installed capacity 2010 - 2015 (MW)]
- [Table 1.10 Forecast for wind turbines market value, 2010-2015 (US\$)]
- [Table 1.11 Forecast for offshore wind power installed capacity, 2010-2015 (MW)]
- [Table 1.12 Forecast for wind power generation and its market value, 2010 - 2015 (billionkWh)]
- [Table 1.13 Forecast for new installed wind turbines distribution by size in 2015 (MW)]
- [Table 1.14 Market share forecast of new installed wind turbines by size in 2015(%)]
- [Table 1.15 Wind farm size change, 2004-2009]
- [Table 1.16 Top wind farms built in 2009]
- [Figure 2.1 Forecast for accumulative installed capacity(AIC) by 2015 and 2020 in six leading wind power provinces (MW)]
- [Figure 2.2 Forecast for accumulative installed capacity (AIC) by 2015 and 2020 in seven major wind power provinces (MW)]
- [Figure 2.3 Inner Mongolia: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.4 Inner Mongolia: 2009 installed capacity share by wind turbine size]
- [Figure 2.5 Inner Mongolia: Forecast for accumulative installed capacity growth 2010 - 2015 (MW)]
- [Figure 2.6 Inner Mongolia: accumulative installed capacity share by developers by 2008]
- [Figure 2.7 Inner Mongolia: 2009 wind power capacity share by developers (MW)]
- [Figure 2.8 Inner Mongolia: accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.9 Inner Mongolia: 2009 new installed capacity share by wind turbine manufacturers(MW)]
- [Figure 2.10 Jilin: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.11 Jilin: 2009 installed capacity share by wind turbine size]
- [Figure 2.12 Jilin: accumulative installed capacity share by 2008 by developers]
- [Figure 2.13 Jilin: 2009 wind power capacity share by developers (MW)]
- [Figure 2.14 Jilin: accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.15 Jilin: 2009 wind power capacity share by wind turbine manufacturers (MW)]
- [Figure 2.16 Liaoning: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.17 Liaoning: 2009 installed capacity share by wind turbine size]
- [Figure 2.18 Liaoning: accumulative installed capacity share by 2008 by developers]
- [Figure 2.19 Liaoning: 2009 wind power capacity share by developers (MW)]
- [Figure 2.20 Liaoning: accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.21 Liaoning: 2009 wind power capacity share by wind turbine manufacturers(MW)]
- [Figure 2.22 Hebei: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.23 : 2009 installed capacity share by wind turbine size]
- [Figure 2.24 Hebei: accumulative installed capacity share by 2008 by developers]
- [Figure 2.25 Hebei: 2009 wind power capacity share by developers (MW)]
- [Figure 2.26 Hebei:accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.27 Hebei: 2009 wind power capacity share by wind turbine manufacturers (MW)]
- [Figure 2.28 Heilongjiang: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.29 Heilongjiang: 2009 installed capacity share by wind turbine size]
- [Figure 2.30 Heilongjiang: accumulative installed capacity share by 2008 by developers]
- [Figure 2.31 Heilongjiang : 2009 wind power capacity share by developers (MW)]
- [Figure 2.32 Heilongjiang: accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.33 Heilongjiang: 2009 wind power capacity share by wind turbine manufacturers (MW)]
- [Figure 2.34 Ningxia: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.35 Ningxia: 2009 installed capacity share by wind turbine size]
- [Figure 2.36 Ningxia: accumulative installed capacity share by 2008 by developers]
- [Figure 2.37 Ningxia: 2009 wind power capacity share by developers (MW)]
- [Figure 2.38 Ningxia: accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.39 Ningxia: 2009 wind power capacity share by wind turbine manufacturers(MW)]
- [Figure 2.40 Shandong: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.41 Shandong: 2009 installed capacity share by wind turbine size]
- [Figure 2.42 Shandong: accumulative installed capacity share by 2008 by developers]
- [Figure 2.43 Shandong: 2009 wind power capacity share by developers]
- [Figure 2.44 Shandong: accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.45 Shandong: 2009 wind power capacity share by wind turbine manufacturers(MW)]
- [Figure 2.46 Gansu: the accumulative installed capacity growth from 2006 to 2009 (MW)]
- [Figure 2.47 Gansu: 2009 installed capacity share by wind turbine size]
- [Figure 2.48 Gansu: accumulative installed capacity share by 2008 by developers]
- [Figure 2.49 Gansu: 2009 wind power capacity share by developers (MW)]
- [Figure 2.50 Gansu: accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.51 Gansu: 2009 wind power capacity share by wind turbine manufacturers (MW)]
- [Figure 2.52 Xinjiang: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.53 Xinjiang:2009 installed capacity share by wind turbine size]
- [Figure 2.54 Xinjiang:accumulative installed capacity share by 2008 by developers]
- [Figure 2.55 Xinjiang: 2009 wind power capacity share by developers (MW)]
- [Figure 2.56 Xinjiang:accumulative installed capacity share by 2008 by wind turbine manufacturers]
- [Figure 2.57 Xinjiang: 2009 wind power capacity share by wind turbine manufacturers(MW)]
- [Figure 2.58 Jiangsu: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.59 Jiangsu: 2009 installed capacity share by wind turbine size]
- [Figure 2.60 Jiangsu: 2009 wind power capacity share by developers (MW)]
- [Figure 2.61 Jiangsu: 2009 wind power capacity share by wind turbine manufacturers (MW)]
- [Figure 2.62 Guangdong: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.63 Guangdong: 2009 installed capacity share by wind turbine size]
- [Figure 2.64 Guangdong: 2009 wind power capacity share by developers (MW)]
- [Figure 2.65 Guangdong: 2009 wind power capacity share by wind turbine manufacturers(MW)]
- [Figure 2.66 Fujian: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 2.67 Fujian: 2009 installed capacity share by wind turbine size]
- [Figure 2.68 Fujian: 2009 wind power capacity share by developers (MW)]
- [Figure 2.69 Fujian: 2009 wind power capacity share by wind turbine manufacturers]
- [Figure 2.70 Shanghai: growth of accumulative installed capacity 2006-2009 (MW)]
- [Figure 3.1 New and accumulative capacity share distribution by ownership 2007-2009]
- [Table 3.1 Newly installed wind turbines in China by size, 2009]
- [Figure 3.2 Sinovel: market share change by accumulative and new capacity in 2007-2009]
- [Figure 3.3 Sinovel's major end users by installed capacity in 2009]
- [Figure 3.4 Goldwind: market share change by accumulative and new capacity in 2007-2009]
- [Figure 3.5 Goldwind's major end users by installed capacity in 2009]
- [Figure 3.6 DFST: market share change by accumulative and new capacity in China in 2007-009]
- [Figure 3.7 DFST's major end users by installed capacity in 2009]
- [Figure 3.8 United Power: market share change by accumulative and new capacity in 2008-2009]
- [Figure 3.9 United Power's major end users by installed capacity in 2009]
- [Figure 3.10 Mingyang : market share change by accumulative and new capacity in 2007-2009]
- [Figure 3.11 Mingyang's major end users by installed capacity, 2005-2009]
- [Figure 3.12 XEMC: market share change by accumulative and capacity in 2007-2009]
- [Figure 3.13 XEMC's major end users by installed capacity in 2009]
- [Figure 3.14 Sewind: market share change by accumulative and new capacity in China in 2007-2009]
- [Figure 3.15 SE's major end users by installed capacity in 2009]
- [Figure 3.16 Windey: market share change by accumulative and new capacity in 2007-2009]
- [Figure 3.17 Windey's major end users by installed capacity in 2009]
- [Figure 3.18 Vestas: market share change by accumulative and new capacity in 2007-2009]
- [Figure 3.19 Vestas's major end users by installed capacity in 2009]
- [Figure 3.20 Gamesa: market share change by accumulative and new capacity in 2007-2009]
- [Figure 3.21 GE: market share change by accumulative and new capacity in 2007-2009]



-
- [Figure 3.22 GE's major end users by installed capacity in 2009]
 - [Figure 3.23 Suzlon: market share change by accumulative and new capacity in 2007-2009]
 - [Table 3.2 Accumulative capacity and market share change by major developers 2008-2009]
 - [Figure 3.24 Market share distribution by major developers in 2009 new capacity]
 - [Figure 3.25 Longyuan: New and accumulative capacity growth in 2006-2009 (MW)]
 - [Figure 3.26 Longyuan: new capacity distribution by manufacturers in 2009]
 - [Figure 3.27 Longyuan: new capacity distribution by provinces in 2008 and 2009]
 - [Figure 3.28 Longyuan: new capacity distribution by provinces in 2009]
 - [Figure 3.29 Datang: New and accumulative capacity growth in 2006-2009 (MW)]
 - [Figure 3.30 Datang: new capacity distribution by provinces in 2008]
 - [Figure 3.31 Datang: new capacity distribution by provinces in 2009]
 - [Figure 3.32 Datang: new capacity distribution by manufacturers in 2009]
 - [Figure 3.33 Huaneng: New and accumulative capacity growth in 2006-2009 (MW)]
 - [Figure 3.34 Huaneng: new capacity distribution by manufacturers in 2009]
 - [Figure 3.35 Huaneng: new capacity distribution by province in 2008]
 - [Figure 3.36 Huaneng: new capacity distribution by province in 2009]
 - [Figure 3.37 Huadian: New and accumulative capacity growth 2006-2009 (MW)]
 - [Figure 3.38 Huadian: new capacity distribution by manufacturers in 2009]
 - [Figure 3.39 Huadian: new capacity distribution by provinces in 2008]
 - [Figure 3.40 Huadian: new capacity distribution by provinces in 2009]
 - [Figure 3.41 Guohua: New and accumulative capacity growth in 2006-2009 (MW)]
 - [Figure 3.42 Guohua: new capacity distribution by provinces in 2008]
 - [Figure 3.43 Guohua: new capacity distribution by provinces in 2009]
 - [Figure 3.44 Guohua: new capacity distribution by manufacturers in 2009]
 - [Figure 3.45 CGN: New and accumulative capacity growth 2007-2009 (MW)]
 - [Figure 3.46 CGN: new capacity distribution by manufacturers in 2009]
 - [Figure 3.47 CGN: new capacity distribution by provinces in 2009]
 - [Figure 3.48 Jingneng: New and accumulative capacity growth 2007-2009 (MW)]
 - [Figure 3.49 Jingneng: new capacity distribution by manufacturers in 2009]
 - [Figure 3.50 CECIC: New and accumulative capacity growth 2006-2009 (MW)]
 - [Figure 3.51 CECIC: new capacity distribution by provinces in 2009]
 - [Figure 3.52 China Power Investment: New and accumulative capacity growth 2007-2009 (MW)]
 - [Figure 3.53 China Power Investment: new capacity distribution by provinces in 2009]
 - [Table 3.3 Major services for wind farms in China]
 - [Figure 3.54 Cost structure of wind farms in China]
 - [Table 3.4 Xinjiang Wind Energy: services and projects]
 - [Table 3.5 Xinjiang Jindaban: services and projects]
 - [Table 3.11 Beijing Eulkind: services and projects]]
 - [Table 3.12 China 17th MCC: services and projects]]
 - [Table 3.13 CEPRIRED: services and projects]]
-