



# China Wind Power Markets and Strategies, 2008–2020

November 2008

## Study Highlights:

### Strategy Profiles

- State power generators
- Chinese developers and foreign entrants
- Chinese, foreign, and joint venture wind turbine suppliers
- Component suppliers of blades, gearboxes, generators, bearings
- Select tower and control system manufacturers

### Supply Chain Positioning and Analysis

- Production and sourcing trends for blades, gearboxes, generators, bearings

### Wind Turbine Manufacturer and Component Supplier Analysis

- Wind turbine infrastructure market trends and structure
- Local vs. foreign turbine supply analysis
- Installations by vendor and product size
- Supply chain analysis

### China Wind Power Market Forecasts through 2020

- Factors include: power generation mix, national and provincial policy, transmission, project development process, and supply chain

### Regulatory Market Drivers and Inhibitors

- Renewable energy laws by province
- Wind energy incentives
- Project permitting and siting
- Transmission

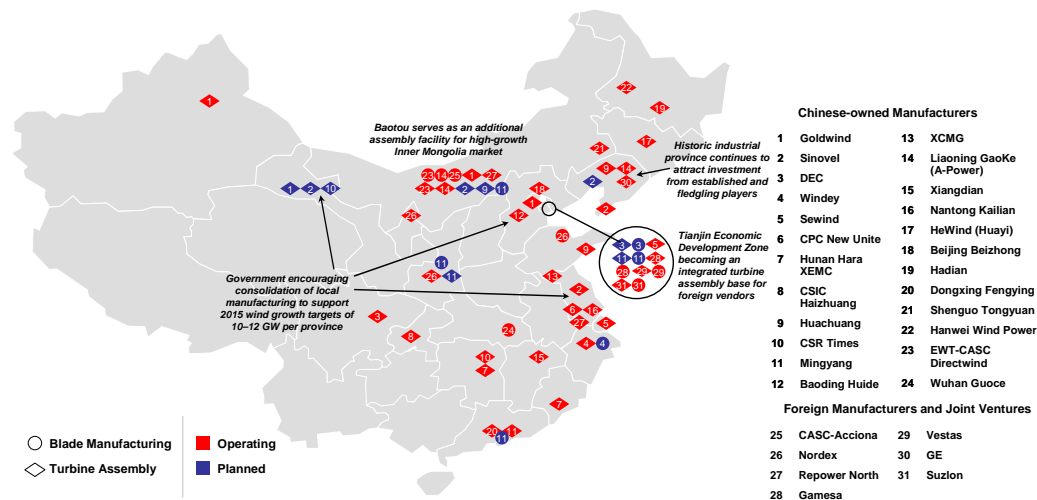
### China Wind Power Market Environment Ranking by Province

China is roaring ahead with wind power build-out on its way toward 135 GW of installed wind capacity by 2020 -- a \$300 billion investment over the period. These enormous investment levels are intended to clean up China's energy picture, and to support the development of a globally competitive wind turbine supply chain, from turbines to gearboxes and blades. The bottom line: China's wind power explosion will have a transformational impact on the global industry. What are the opportunities to participate in China's wind development? How can you navigate the complex regulatory and financial environment? Which of China's wind turbine and component manufacturers have the strongest position and which are planning to export?

EER's new study, *China Wind Power Markets and Strategies, 2008–2020*, provides critical competitive analysis for those seeking to compete in China's wind market -- helping to navigate and evaluate opportunities – for those trying to understand the unfolding wind turbine supply industry and its implications for global competition. Key findings in the study:

- **China is on track to lead the global wind market in annual installations by 2011**, supported by strong political will, improving incentives, and vast natural and industrial resources. But growth will depend on greater supply competition, improved and enhanced transparency of project economics, and improvements in the quality of locally manufactured turbines and wind project design. How these factors evolve will determine the size and nature of opportunities in the decade ahead.
- **China's wind development value chain is evolving**, with major state generators consolidating their presence while IPPs and foreign entrants seize opportunities as project owners, operators, and technical consultants. China's industry-wide demand for project management and technical skills will perpetuate opportunities for foreign ownership, executed in the form of equity-based partnerships.
- **Turbine and component manufacturers are stepping up to meet booming demand**, striking a balance between quality, production capacity, cost, and local content. China's national wind power base initiative is creating opportunities for manufacturers to scale up their product offering to capture mega-scale project contracts as well as potential export sales. As the market matures, rapid supply chain build-up should introduce reliable sourcing options for all players, enabling greater standardization in quality and pricing.

## Exhibit: China Wind Turbine Production Facility (Current and Planned)



Source: Emerging Energy Research

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4. China State Generator Company, Developer, and IPP Wind Power Strategies
5. Competitive Analysis of Chinese Wind Turbine Markets
6. Chinese Wind Turbine Supply Chain Overview

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