

WIND TURBINE COMPONENT SUPPLY CHAIN STRATEGIES: 2010-2025 June 2010

STUDY HIGHLIGHTS

Component Supply Chain Positioning

- Outsourcing
- Market Fragmentation
- Product Trends (1.5 to 3MW)
- Competition
- Market Positioning

Strategy Profiles (127)

- Turbine Manufacturers (48)
- Blade Manufacturers (12)
- Gearbox Suppliers (14)
- Bearings Suppliers (15)
- Tower Manufacturers (21)
- Generator and Power Converter Manufacturers (17)

Global Wind Turbine Component Market Forecasts: 2010-2025

- Onshore and Offshore
- By Component
- By Segment

Wind Turbine OEM Supply Chain Strategies

- Vertical Integration vs. Outsourcing
- Product and Technology Strategies
- Geographic Footprints
- Wind Turbine OEM Production Strategies

Component Market Trend Analysis

- Component Supply Trends
- Product and Technology Strategies
- OEM Blade Market Trends
- Bearing Market Trends
- Gearbox Market Trends
- Tower Market Trends
- Generator and Power Converter Market Trends

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While 2009 was a challenging year for the wind turbine industry, the situation has worsened in 2010 with the drought of new orders and the drop in installations in the US, a key growth market. However, the rise of Chinese wind turbine manufacturers and offshore growth in Europe signal key areas of opportunity going forward. To adapt, wind turbine component suppliers are trimming their production capacity and retooling their strategies to compete in a more technically complex, larger-scale and globalized supply chain.

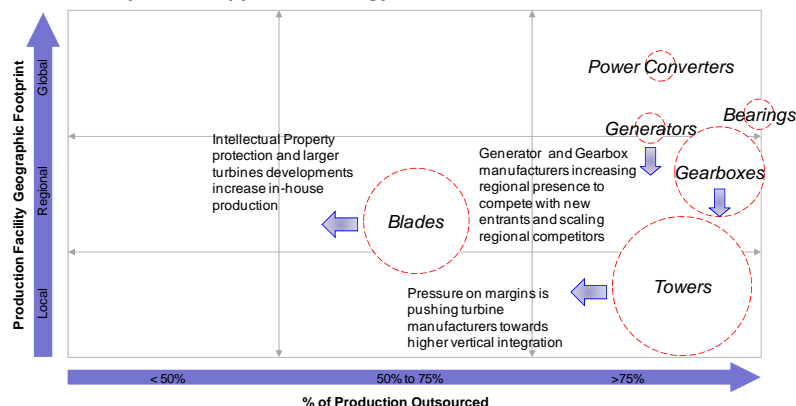
Suppliers of blades, gearboxes, towers, bearings, generators, and power converters recognize the market's steady march toward larger machines and new technologies such as direct drive, which will require them to extend their manufacturing reach globally, increase their product size, and lower their costs for wind energy to remain competitive.

A new, comprehensive study from IHS Emerging Energy Research, **Wind Turbine Component Supply Chain Strategies: 2010-2025**, is your guide for understanding the increasingly complex and competitive wind industry supply chain. This study analyzes wind turbine component market trends within the context of the global wind turbine industry, focusing on each of the main component segments of the wind turbine industry (blades, bearings, gearboxes, towers, generators and power converters).

Through market forecasts, competitive analysis, product portfolio overview, and company profiles, this study covers the following trends and more:

- **Blade** suppliers are adapting their strategies as OEMs expand their in-house production
- The industry's increasing move to gearless technology in the 3 MW and above segment is threatening **gearbox** manufacturers' business
- China's supply chain continues to mature, with local **bearing** manufacturers developing significant wind-specific supply plans
- **Tower** suppliers increasing differentiation through services, innovation, and specialization
- Long-term competitiveness in the **generator and power converter** segments to rely on permanent magnet and larger products

Exhibit: Component Suppliers' Strategy Overview



Source: IHS Emerging Energy Research

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 - Shenyang Huachuang Wind Energy Corp. (Huachuang)
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 - CSR Zhuzhou Electric Locomotive Research Institute (CSR ZELRI)
 - Envision Energy
 - Zhejiang Huayi Wind (HeWind)
 - CSIC Chongqing Haizhuang Windpower Equipment Co. (CSIC Haizhuang)
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Gebox SL
Hangzhou Advance Wind Power Gearbox Group
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DS SM A/S
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KGW Schweriner Maschinen- und Anlagenbau GmbH (KGW)
Leucci Costruzioni SpA
Martifer Energy Systems
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Additional wind power market studies available from IHS Emerging Energy Research:

- US Wind Power Markets and Strategies: 2011-2025 (Released May 2011)
- Asia Wind Turbine Strategies in the Global Market: 2011-2025 (Released February 2011)
- Wind Turbine Component Supply Chain Strategies: 2010-2025 (Released June 2010)
- Global Wind Turbine Markets and Strategies: 2010-2025 (Released June 2010)
- Latin America Wind Power Markets and Strategies: 2010-2025 (Released April 2010)

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