

Gamesa China

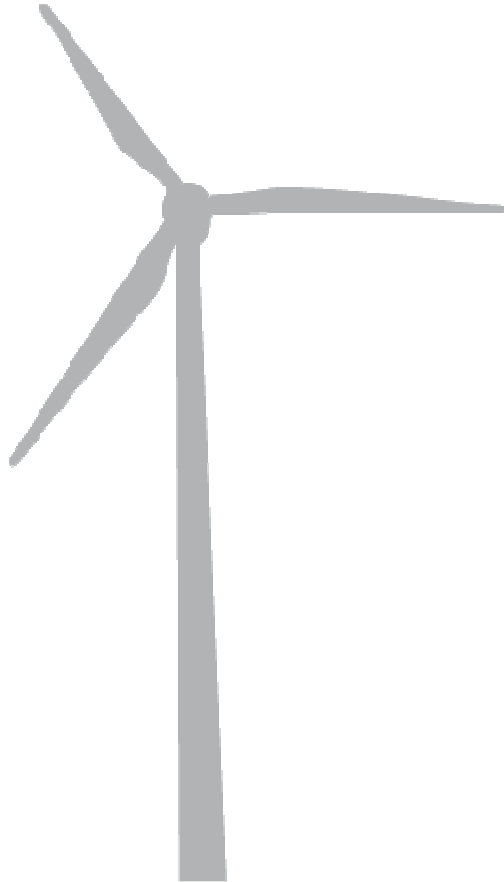
Committed to Developing the Wind Industry

Jorge Calvet, Chairman of Gamesa

Shanghai, 14th September 2010



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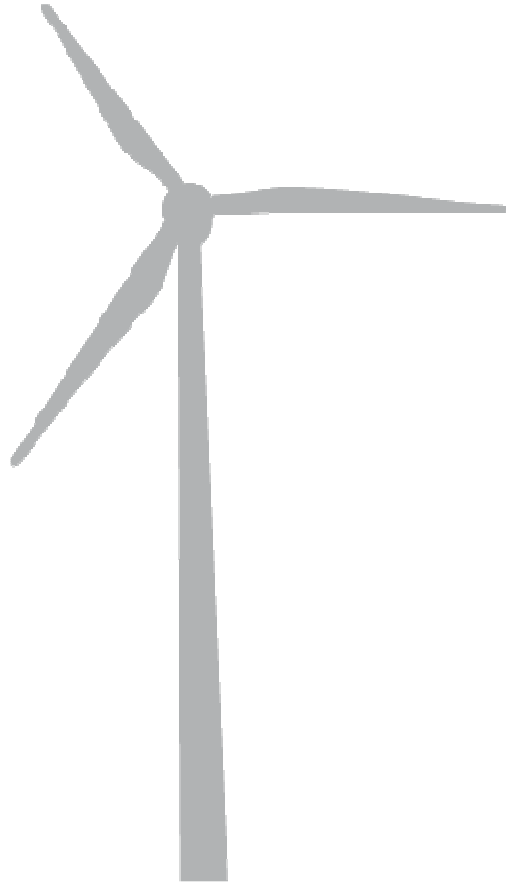
Wind power sector

Wind power in China

Gamesa China

Gamesa - Global technology, everlasting energy

Wind power sector: facts, drivers and challenges

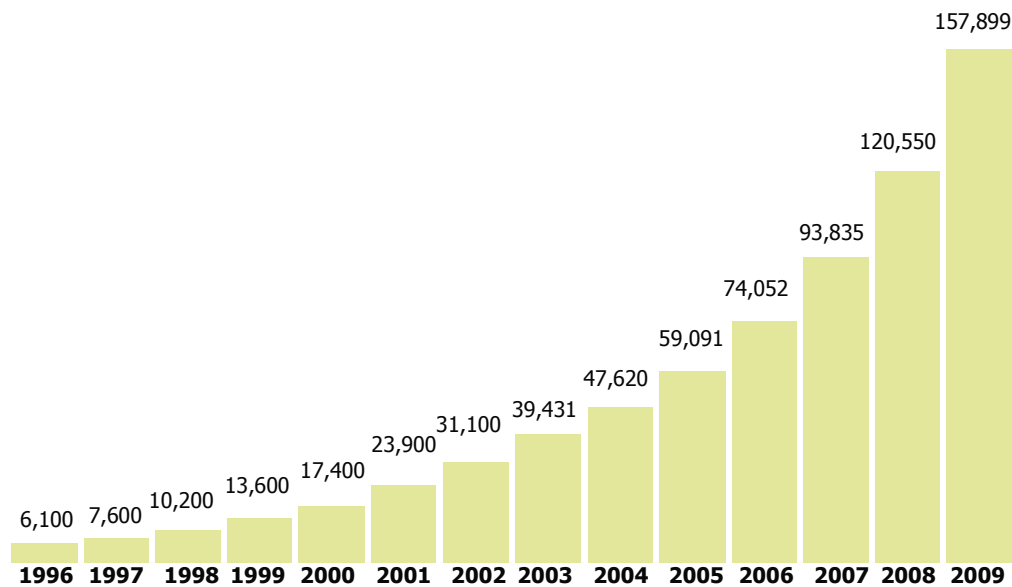


Wind power sector

Mature technology in demand worldwide

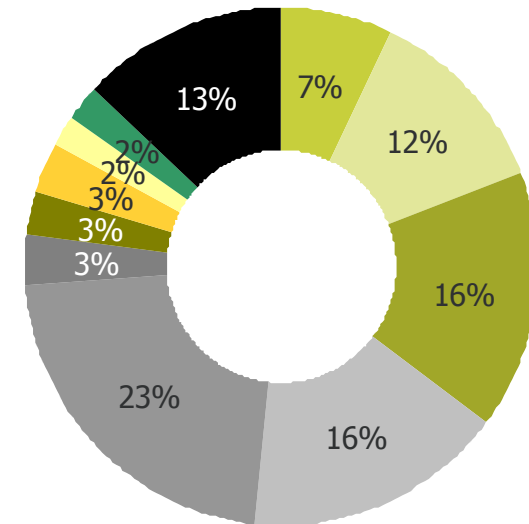
Global installed wind power capacity

Cumulative MW



Source: GWEC

Capacity installed in 2009 (MW)



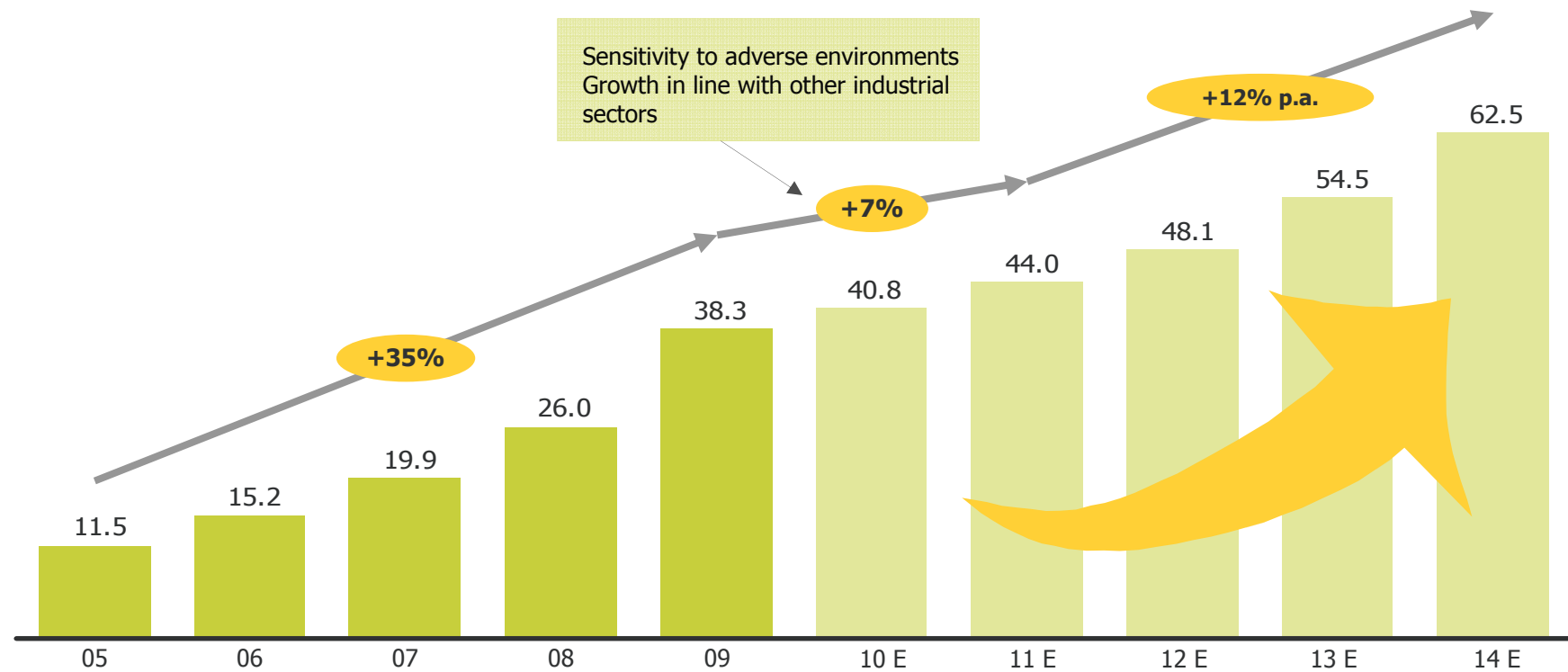
- India ■ Spain ■ China ■ Germany
- US ■ Italy ■ France ■ UK
- Portugal ■ Denmark ■ RoW

Wind power sector

Gradual and predictable growth

Global installed wind turbines

GW

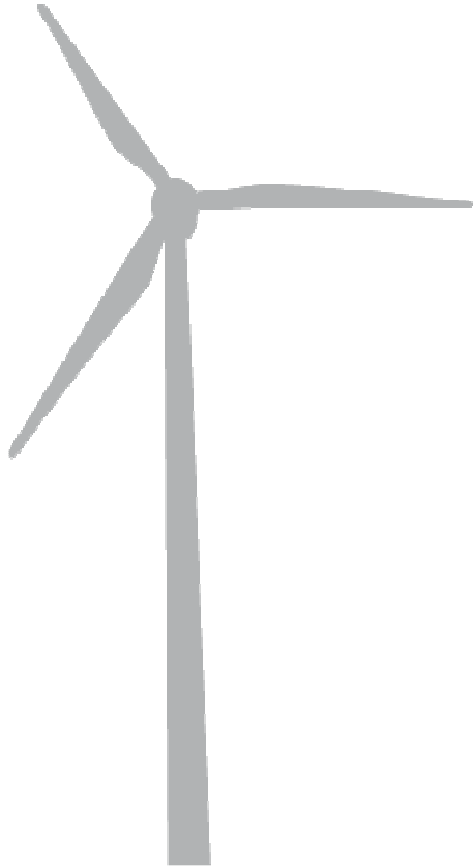


Source: GWEC

Local development benefits

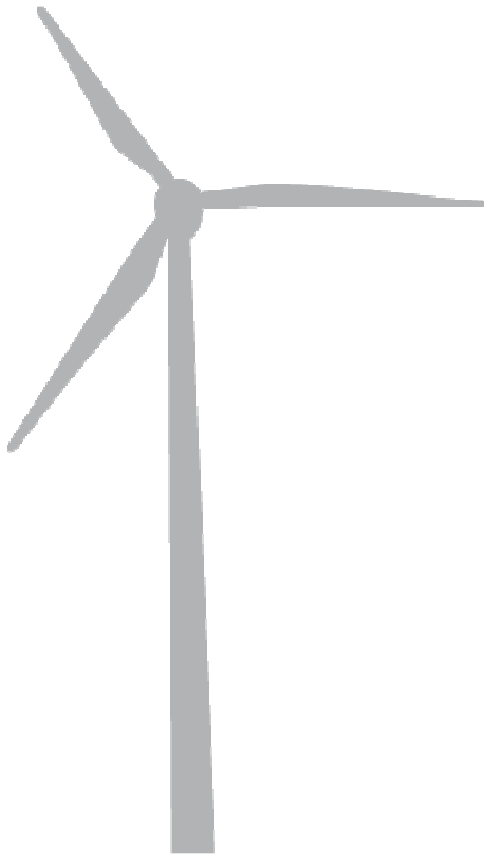
- Helping local government better utilize wind energy
- Providing significant tax revenues to local economy
- Creating fresh employment opportunities
- Developing local suppliers
- Introducing high-technology
- Growing with the market

Wind power sector: growth drivers



Global commitment

To tackle climate change by cutting CO₂ emissions



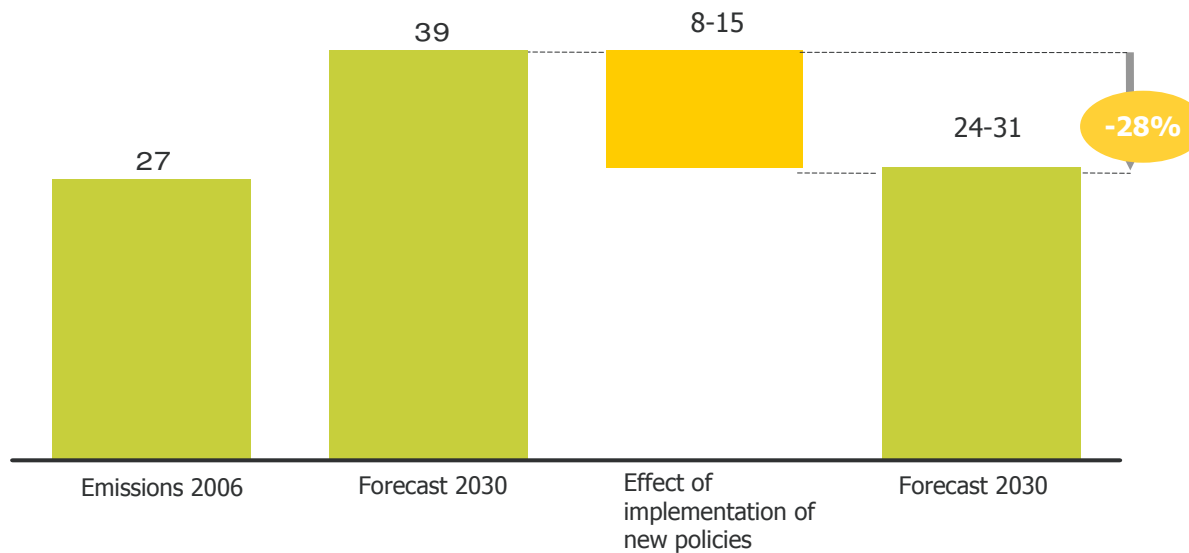
- Energy usage, a fundamental factor unleashing climate change
- Copenhagen Agreement – developed nations to finance development of renewable energy sources in developing nations
- EU 20/20/20 targets
- US – stimulus programs such as production tax credits (PTC), investment tax credits (ITC) and Treasury grants
- China – 5-year plan with scope for raising the initial target of raising contribution of renewable energy to 15% by 2020

Cutting carbon emissions

Contribution of wind power

Energy-related CO₂ emissions⁽¹⁾ in 2030

GT of CO₂



The 158 GW of total capacity at year-end 2009 produced 340 TWh of clean electricity and prevented the emission of 204 million tonnes of CO₂/yr

¹ Including power generation, industry, transportation, construction and other energy sectors
The 550 Policy estimates assume that the mix of low carbon energy sources increases from 19% in 2006 to 25% by 2030, boosted by an increase in renewable energy capacity of 440 GW

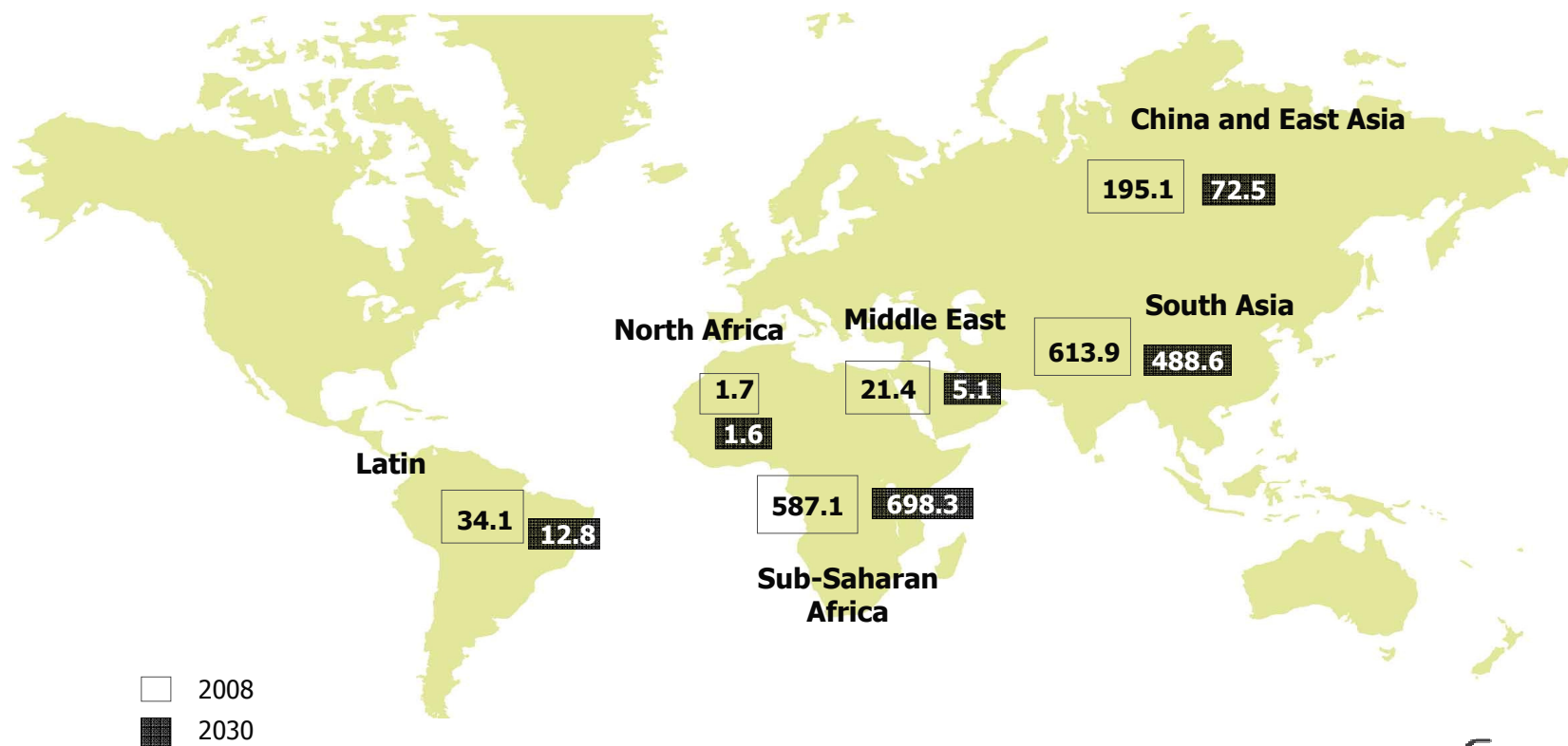
Source: IEA World Energy Outlook 2008

Growth in global demand

In emerging nations, mainly Asia

**Population without access to electricity:
1.5bn in 2008 and an estimated 1.3bn in 2030**

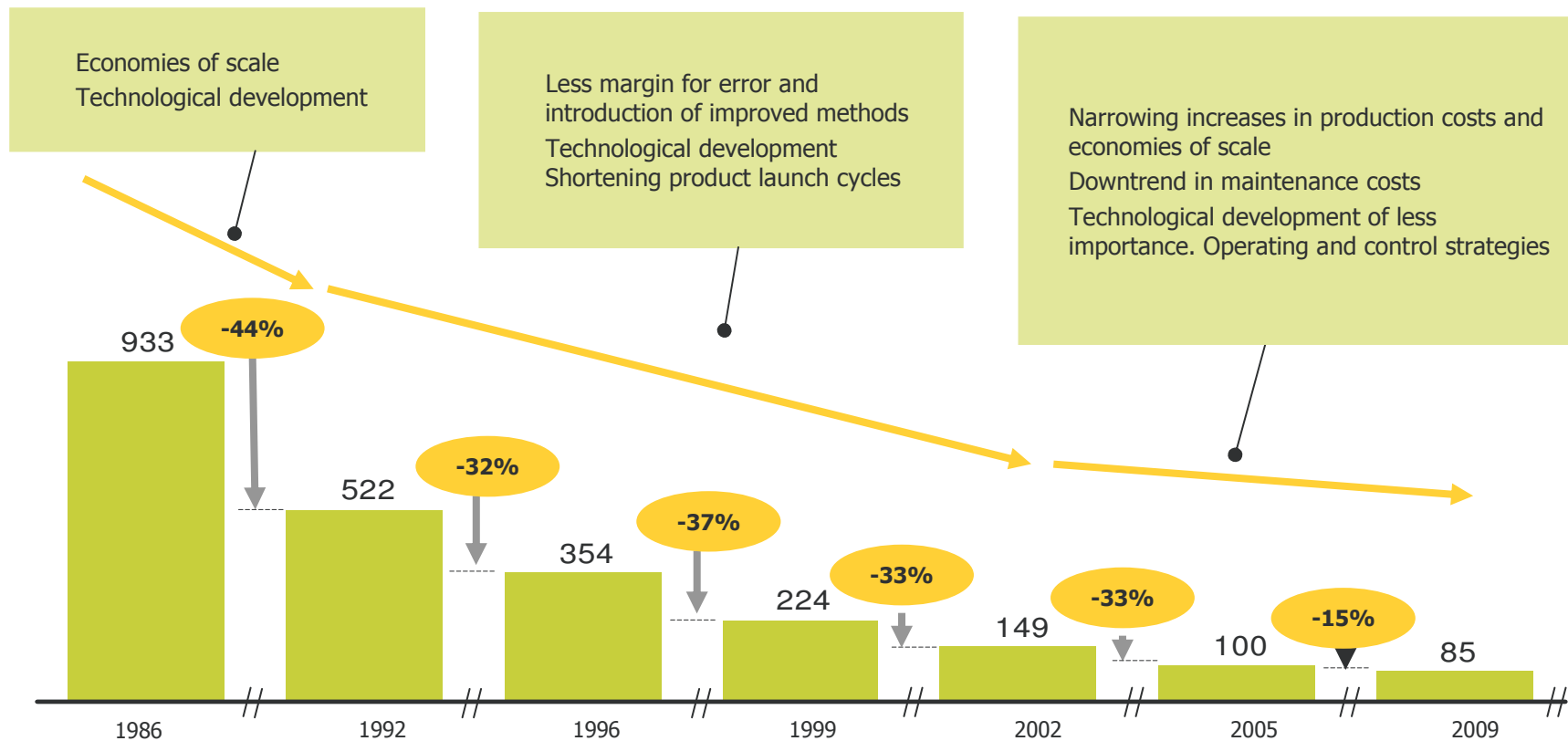
Source: IEA



Drop in wind generation costs

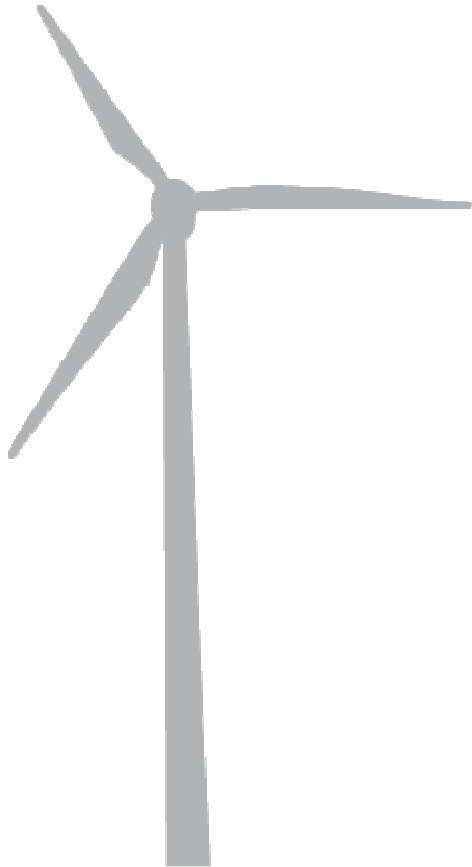
Learning curve in technological solutions

Wind power costs (per kWh) indexed to 2005 = 100



Source: NREL and BTM

Wind power sector: immediate challenges



The new wind power industry

New and more sophisticated demands, greater competition and pressure

The new wind power industry

Demand

- Demand shifting to new geographies
- Technology and innovation, key competitive differentiators
- More sophisticated customers/demands

Competition

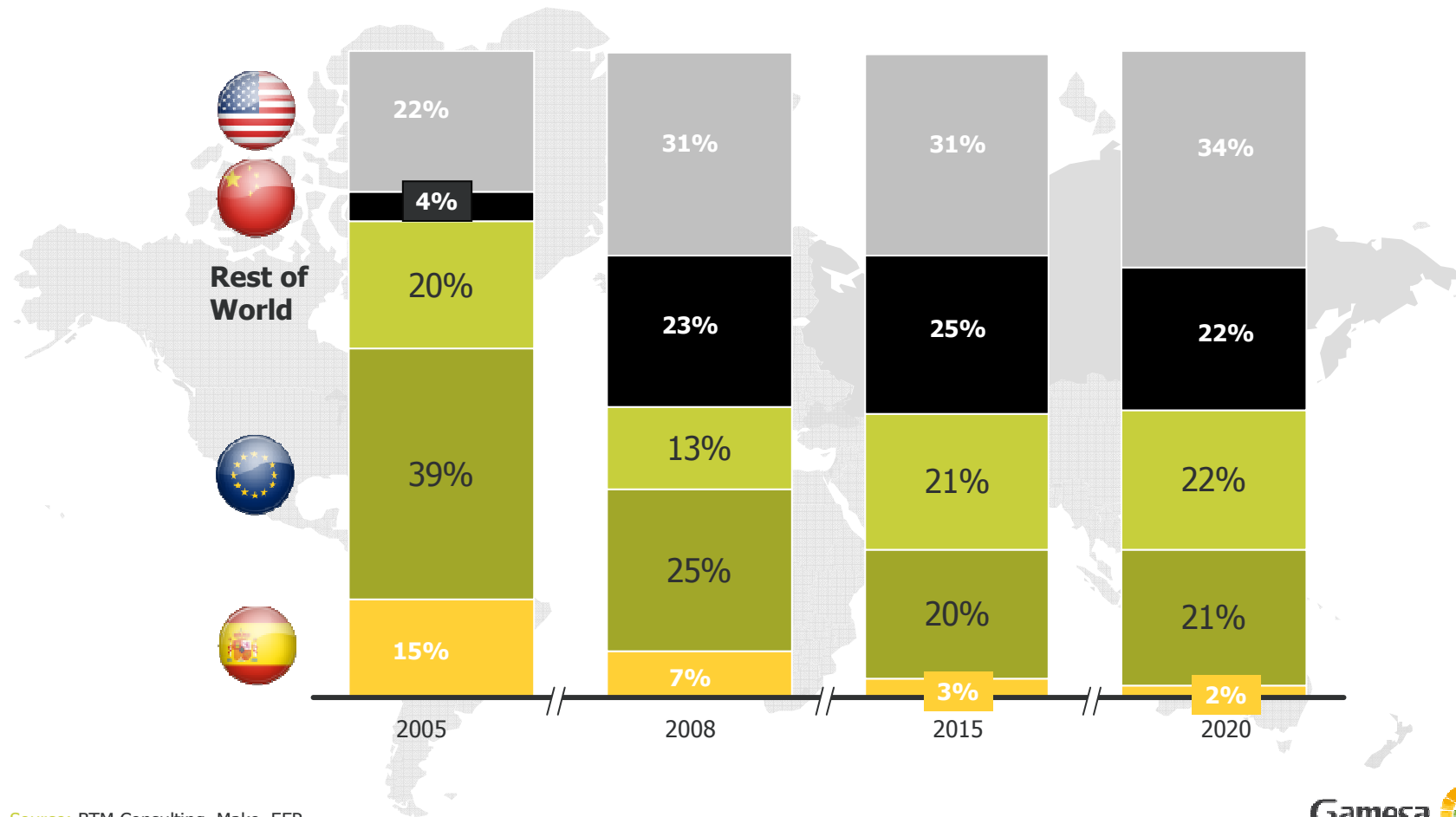
- Traditional players need to react swiftly to hold on to competitive advantages
- Advent of newcomers, particularly in the low cost segment/markets

Regulation

- Growing pressure on the support mechanisms designed to foster growth of renewable energy

Shift in demand

US, China and RoW, the growth markets

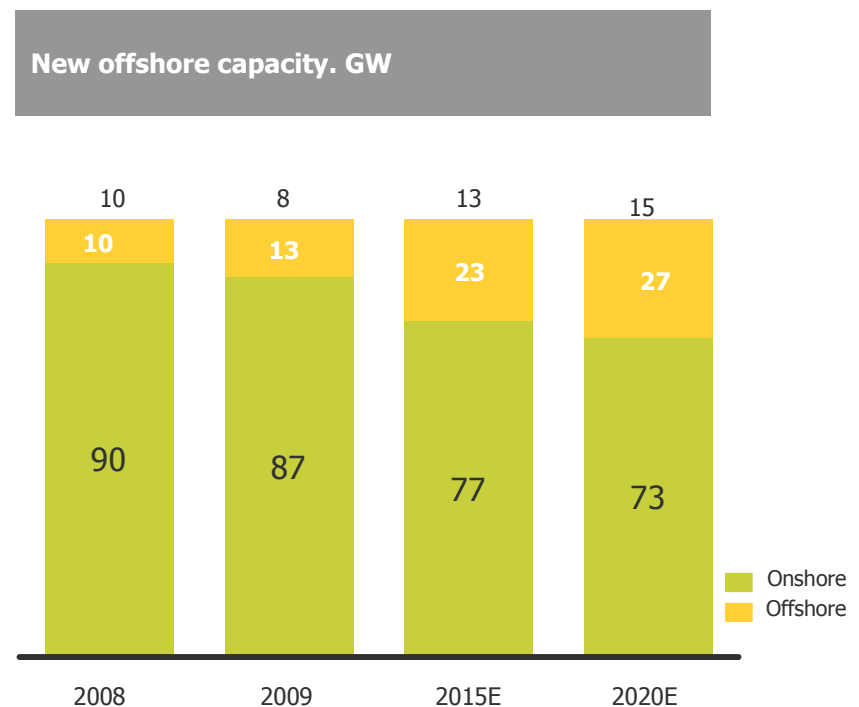
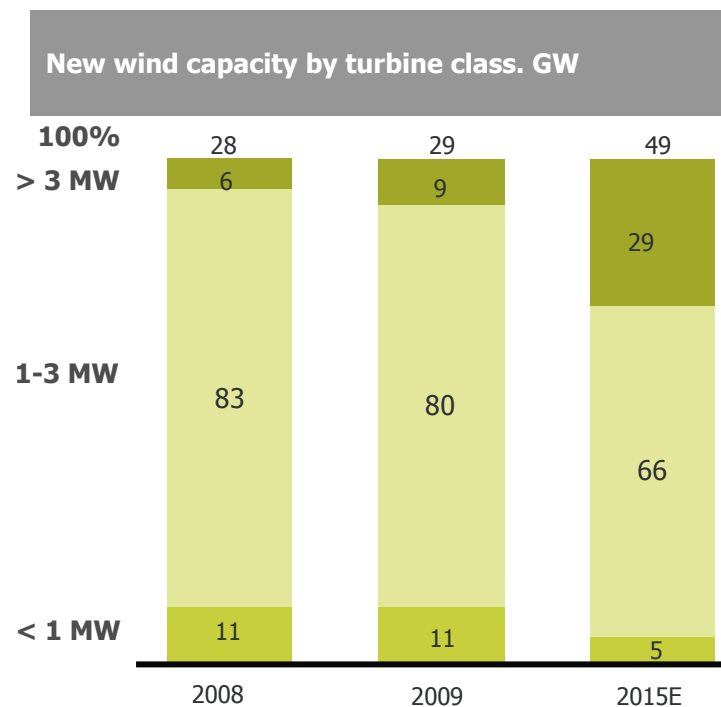


Source: BTM Consulting, Make, EER

Innovation and technology

Ongoing and evolving response to emerging needs

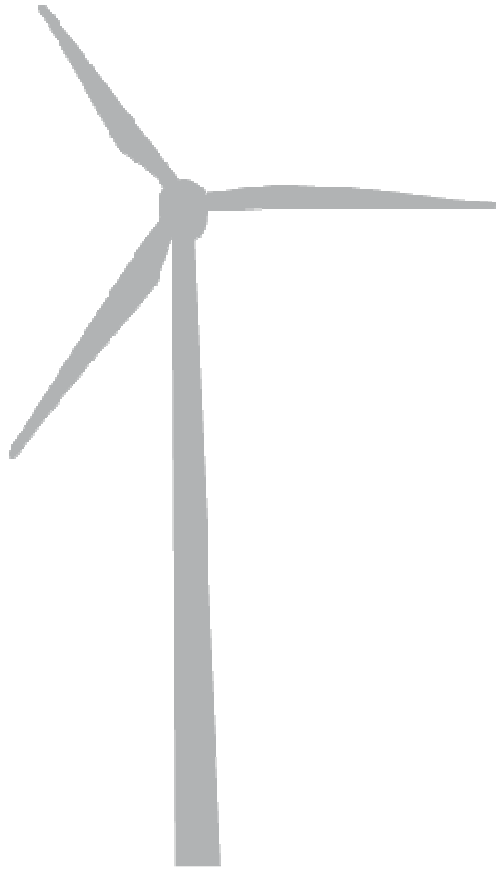
Flexibility, staying ahead of curve, ability to react in order to develop technology for all types of markets and wind conditions



Source: Emerging Energy Research.
McKinsey

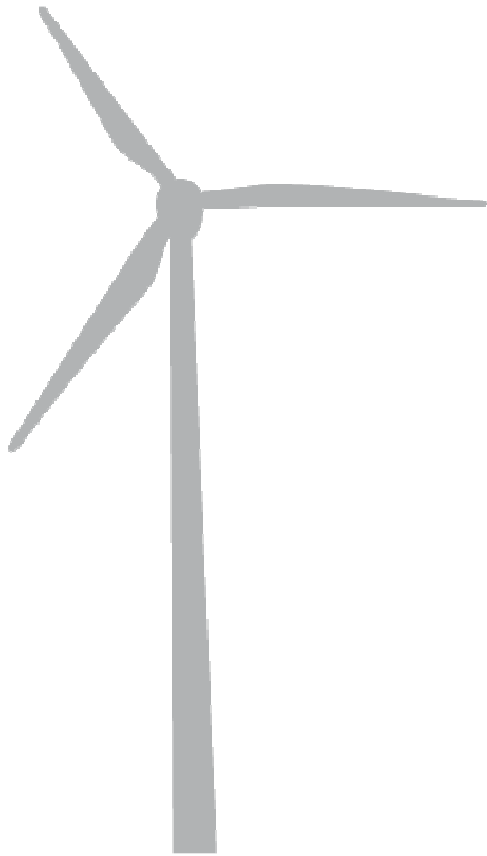


Wind power in China



Wind power in China

Wind power support China's energy development



- Supports China Energy Commission's targets that 15% of energy consumption should be from non-fossil sources and carbon dioxide emissions should be cut by 40-45% per unit of GDP by 2020
- A mature and competitive technology that harnesses an "everlasting" source of indigenous power reducing oil dependency
- Helps to satisfy the growing demand for energy
- Contributes to guaranteed electrical supply
- Provides stability versus volatility in oil and gas prices
- Is a source of economic development and employment
- Doesn't generate harmful waste
- Is necessary to combat climate change

Wind power in China

A high-volume market with many local players in components and assembly

A market with high growth potential. World's fastest-growing market in 2009

**Strong regulatory support and approval for economic stimulus plans
A commitment to adapting the power grid to wind power rollout**

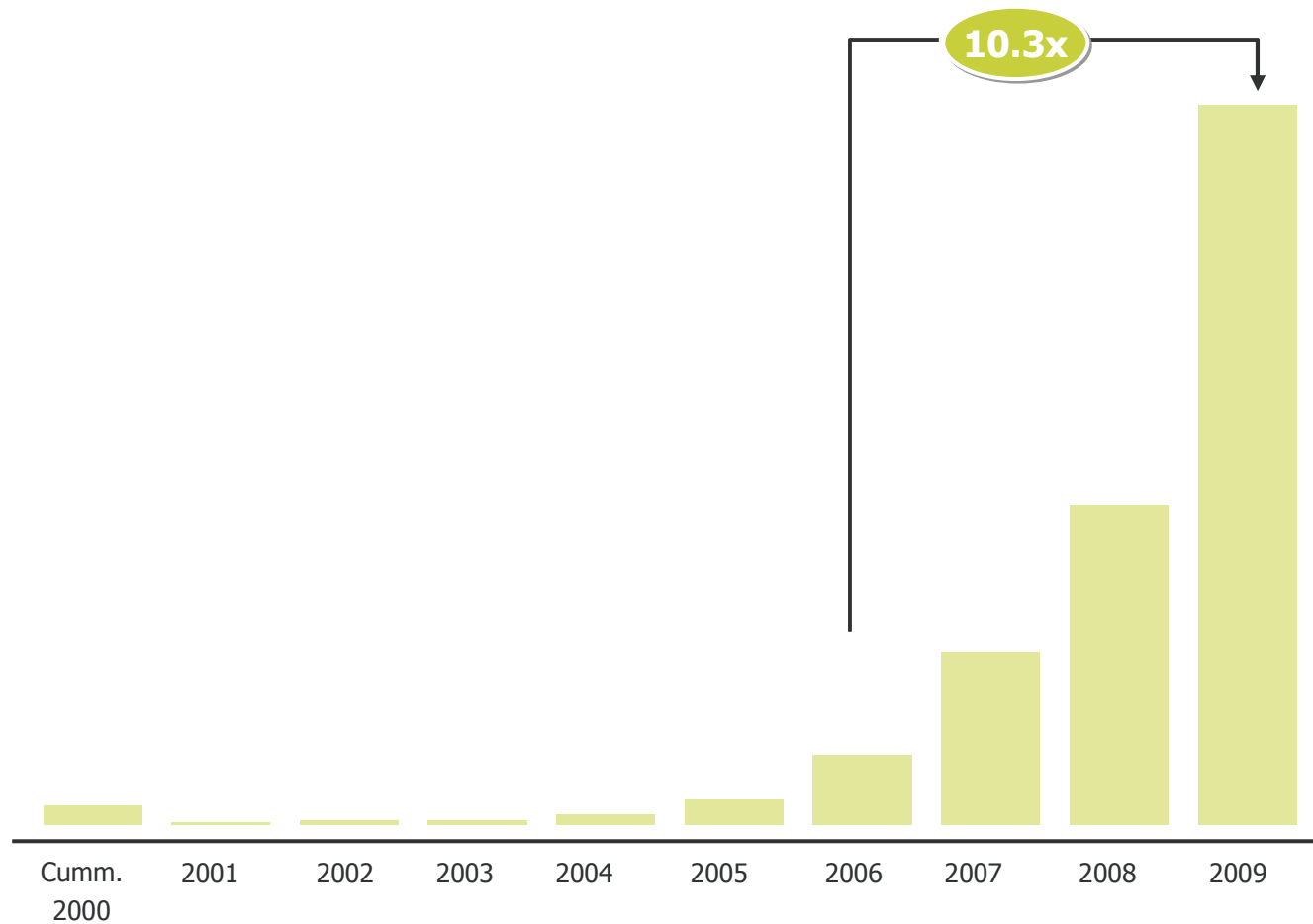
High-quality wind resources concentrated in Inner Mongolia and coastal eastern and northeastern regions. Predominance of sites for medium- and low-strength winds. Demand for turbines with capacity exceeding 1.5 MW

Increasing role of local manufacturers, with a trend towards consolidation

Presence of global manufacturers: comprehensive know-how, innovation, quality and maintenance services

Wind power in China: significant growth

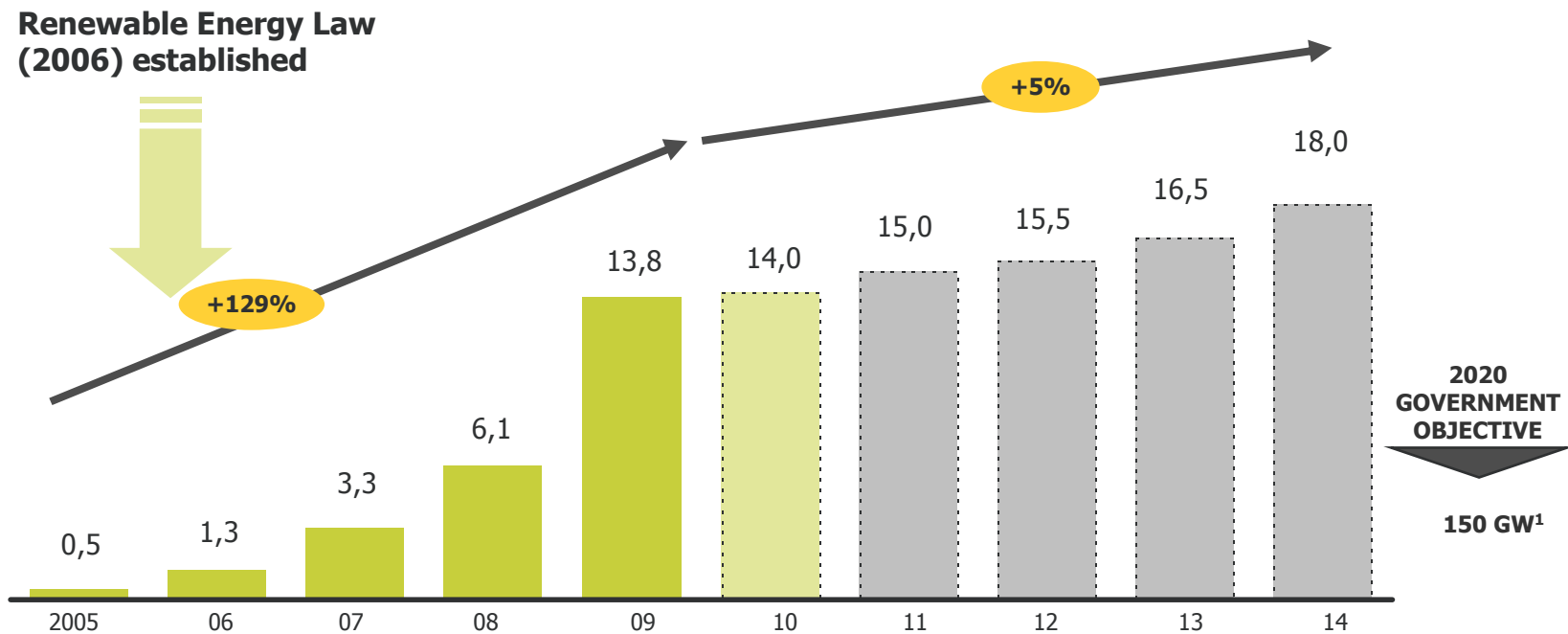
New wind capacity additions



Source: Global Wind Energy Council. April 2010

Wind power in China

Chinese annual wind turbine installations by GW



(1) The central gov's 100 GW target @ 2020 has already been exceeded by provincial plans and it is expected the target to be reviewed to 150 GW

Source: BTM, March 2010

Wind power in China

Strong regulatory support and approval for economic stimulus plans

WIND ENERGY REGULATORY POLICY

Renewable Energy Law 2006

Renewable Energy Law (January 2006)
20,000 MW in 2020

Renewable Energy Development in the Mid-Long term (September 2007)
30,000 MW in 2020

National Energy Board: 7 "Wind Power Bases" of 10 GW each one (2008)
(Inner Mongolia (2), Gansu, Xinjiang, Hebei y Jilin)
150,000 MW in 2020

Announcement of China Stimulus Package

4 trillion yuan package:

- 350.000 MM for environmental and renewable industry
- 180.000 MM for infrastructure and grid
- Increasing credit lines for prioritized projects (Renewable Energy)

**10 GW in 2010 and
150 GW in 2020**

**15% of renewable
energy sources in the
generation mix**

**To lower CDE per unit
of GDP by 40-45% by
2020**

Clean Development Mechanism (CDM) (*)

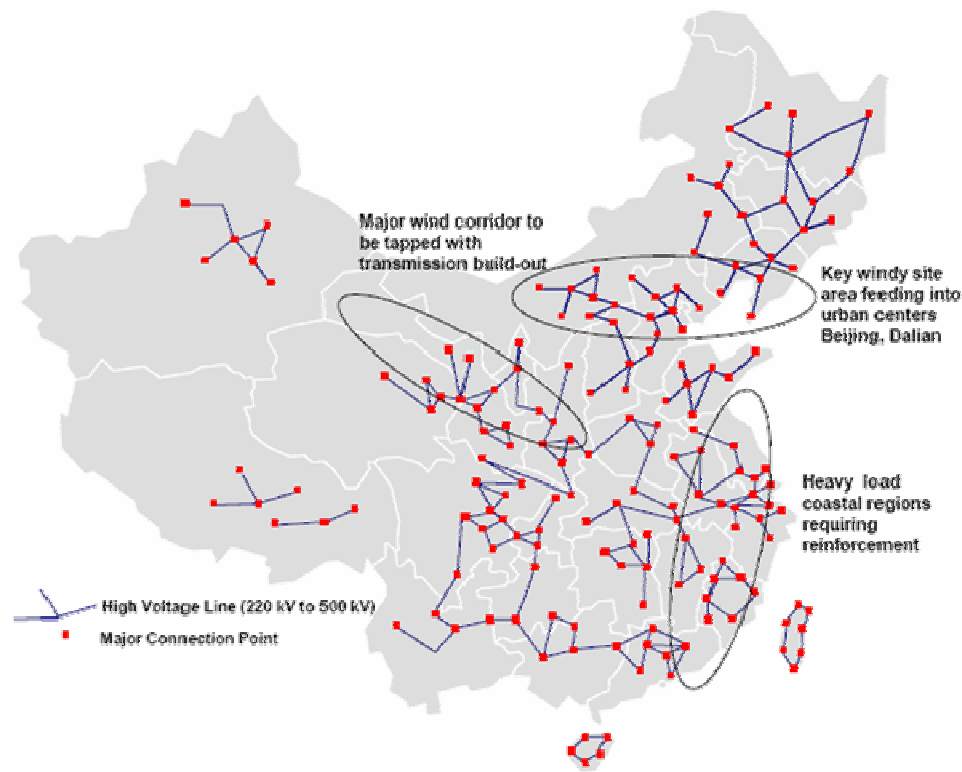
Only 2% tax rate over the total profit in terms of emissions reduction (CER: *Certified Emissions Reductions*), for renewable projects)

Chinese Majority share is compulsory (+51%)

(*) Possible withdrawal stemming from review of the Kyoto Treaty

Wind power in China

Investments need transmission grid connection



- Grid concentrated in central and east of the country
- Most connections require a significant effort in investment
- Likelihood of sizeable plans to upgrade system in the future

Source: EER November 2008

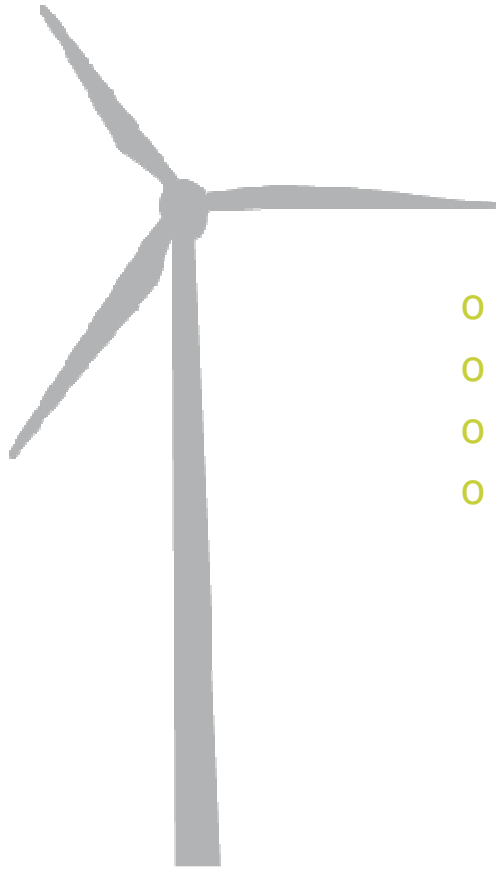
Wind power in China

High quality wind resources concentrated in Inner Mongolia and coastal eastern and northeastern regions



Source: Meteosim AWS Truewind at 70m

Gamesa China



- Cementing role as a market leader 2000-2010
- Investment - increasing presence of the Chinese market
- Sixth manufacturing facility in China
- Product launches: first deliveries of G8X turbines

Gamesa China 2000-2010

Cementing position as a market leader

Cementing its role as one of the leading players in the market: a firm commitment to contributing to the development of wind energy in China in the medium and long term (with plans to remain in China for the long term)

Competitive advantage: comprehensive understanding of the industry, as an industrial manufacturer and wind farm developer

- customer base expansion in numerical and customer profile terms (global and by province)
- high quality industrial base: 6 factories in 3 provinces by 2011
- strategic agreements for the joint development of wind farms

Alliances with the industry's leading utilities and local operators

Committed to local development: localising production & creating jobs here

Gamesa China 2000-2010

A firm commitment, with plans to remain in China for the long term

2000 Gamesa started business in China

2001 Sold first wind turbine to Yumen of Gansun province

2004 Gamesa's market share in the Chinese wind turbine market was 38% or #1

2005 Started Gamesa China Industrialization Plan. Brought development expertise to China and began to develop and explore wind farm development business:

2006 Gamesa's first wind turbine facility began operations

2007 Blade factory began operations and gear box factory started

2008 Generator factory started to operate; first comprehensive production center – including blade, generator, gear box and nacelle assemble – in China

2009 The industrial development plan for the G8x-2MW turbine started (400 MW of new capacity)

2010 Gamesa expands its presence in China by building its fifth manufacturing plant in Jilin and 6th in Inner Mongolia

Forging alliances with local utilities since 2000: Recently cementing commercial relationships with Longyuan, the largest utility in the wind market by installed capacity

2009-2010: expansion of customer base and launch of joint development ventures on a regional basis in conjunction with local utility partners (China Guangdong Nuclear, Huadian, Datang Renewable Power ...)

Gamesa China

Medium-term strategy

Cement Gamesa's position as one of the top 5 players in the wind business

Keep pace with market and customer growth as a wind turbine manufacturer and provider of operations and maintenance services

Wind project developer: forge joint ventures with the country's leading utilities and focus efforts on regions offering the highest wind potential



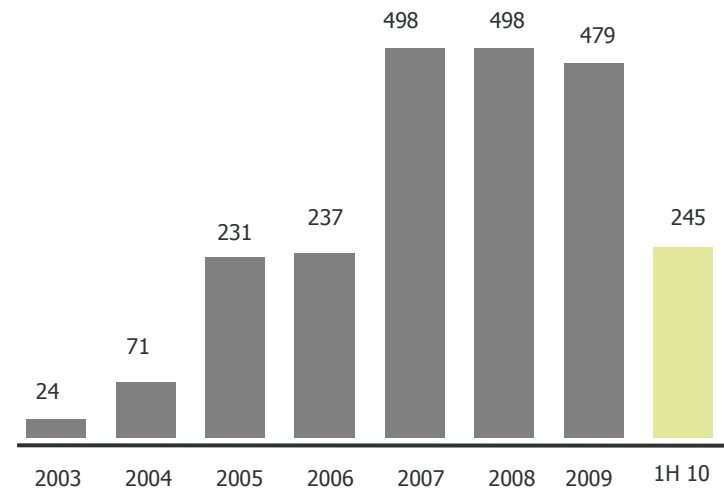
- Upgrade our industrial capacity and products offering in line with market demand and wind conditions
- Reinforce our commitment towards offering cost competitive products to our customers
- Develop China service operations into a 'best –in –class' service provider, increasing value to our customers

Gamesa China

Main figures

| | 2009 | 1H10 |
|--------------------------------|--------------|--------------|
| MW SOLD | 479 | 245 |
| PROMOTION PIPELINE (MW) | 2.204 | 2.675 |
| WORKFORCE | 921 | 1.092 |
| NUMBER OF FACILITIES | 4 | 6 |

MW SOLD

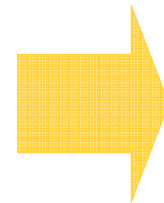
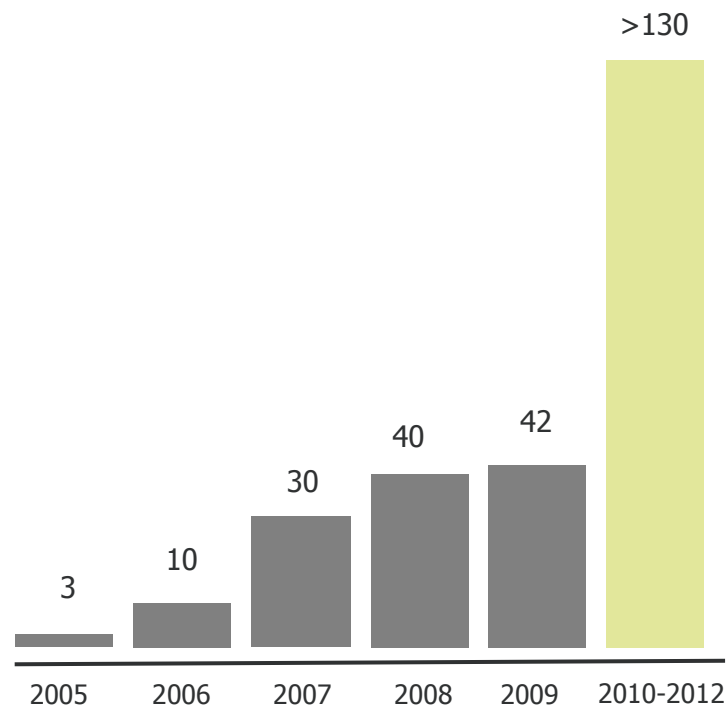


Gamesa China

Investment will triple by 2012

INDUSTRIAL INVESTMENT

Cumulative figures in millions of euros

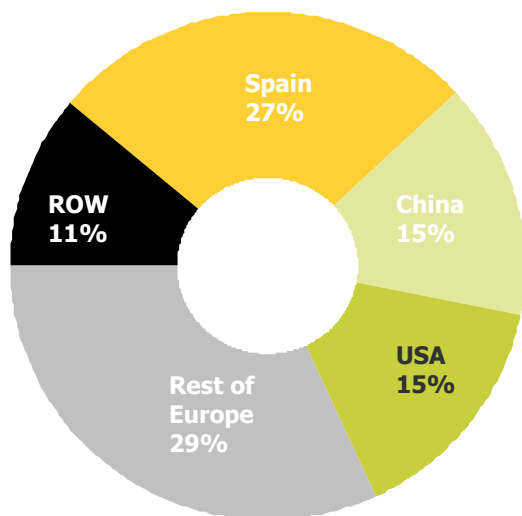


More than 90 million euros (2010-2012) linked to new demand and expanding and adapting factories for rollout of new turbine systems

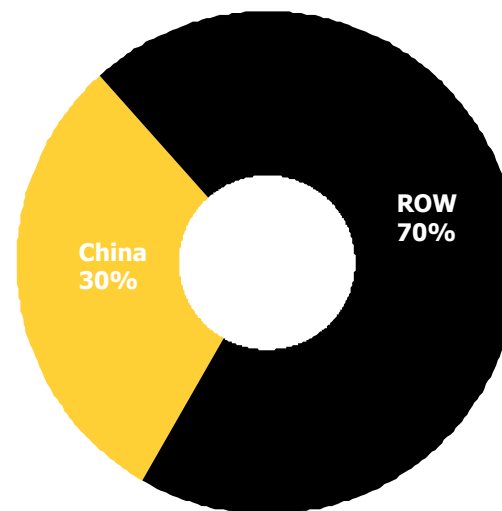
Gamesa China

China will account for more than 30% of total sales in 2011

MW sold 2009



MW sold 2011 (e)



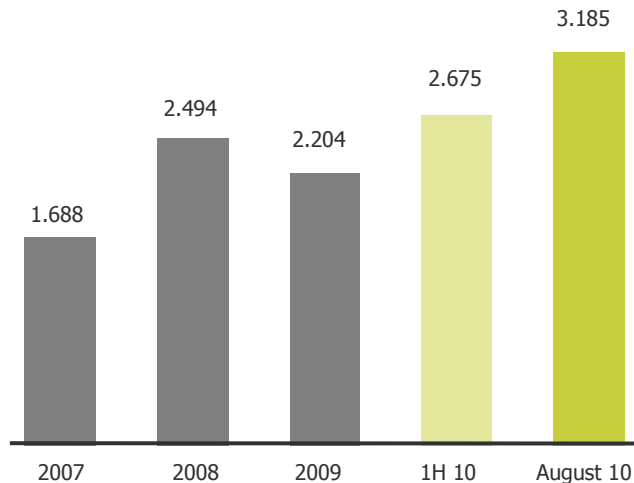
SALES (MW) WILL DOUBLE WITHIN TWO YEARS (*)

(*) According to most recent 2011 sales estimates

Gamesa China

Wind farm development division: development pipeline of over 3,000 MW

PROMOTION PIPELINE (MW)



THE LATEST STRATEGIC AGREEMENT

1,315 MW (2010-2013)

Guangdong Nuclear Wind – 1,026 MW

- Wind farm projects in Liaoning Province (576 MW)
- Wind farm projects in Heilongjiang Province (450 MW)
- G8X-2 MW, manufactured in Gamesa facilities in China
- Gamesa and Guangdong Nuclear Wind have completed the start up of the Taipingshan wind farm and Tangwangshan wind farm Shandong Province

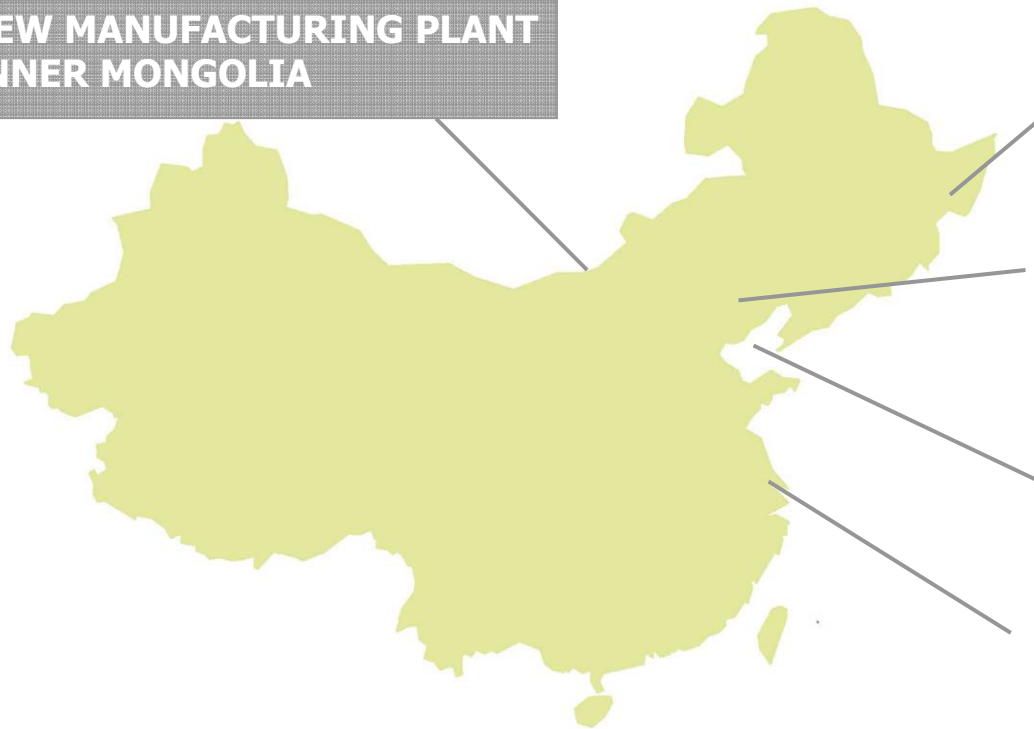
Datang Renewable Power – 289.3 MW

- Wind farm projects in Liaoning Province
- G8X-2 MW and G5X-850 kW machines, manufactured in Gamesa facilities in China

Gamesa China

Expansion and cementing presence in China

**NEW MANUFACTURING PLANT
INNER MONGOLIA**



**NEW MANUFACTURING PLANT
JILIN**

HEADQUARTERS BEIJING

**4 MANUFACTURING PLANTS
(ASSY. NACELLES, GEARBOXES,
GENERATORS AND BLADES)
TIANJIN**

**PURCHASING OFFICE
SHANGHAI**

TIANJIN IS GAMESA'S LARGEST PRODUCTION BASE OUTSIDE SPAIN

Gamesa China

Today, we announce construction of sixth manufacturing plant in China

INNER MONGOLIA

- Located in the heart of China's "wind country": Inner Mongolia Province
- Will manufacture Gamesa's cutting-edge, two- megawatt G8X wind turbine
- Capacity of 500 MW per year
- Significant employment and supply chain benefits for Inner Mongolia
- Directly supporting the following China government policies: "Boost Northeast"
- Energy Savings and Emissions Reduction
- Boost Renewable Energy Sector
- Develop suppliers



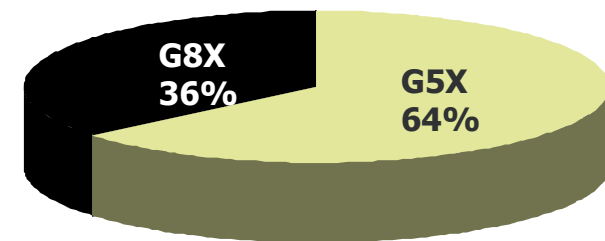
First Gamesa G8X-2 MW turbines

INITIAL DELIVERIES of G8X –2.0 MW turbines

- o Already supplied 62 units (of a total of 96) of Gamesa G8X-2.0 MW turbines.
- o All were manufactured in China
- o **February 2010.** The first machine started production in Tianjin, upon completion of a plant capacity expansion project (400 MW) in 2009
 - Production lines installed in record time, supply chain and manufacturing start-up launched at full speed
 - Global quality management system for the plant and suppliers guarantees unique quality, meeting standards in Europe, the US and Asia

Turbine systems

MW sold in 1H 10



% of G8X nacelle production localised in China
1H 2010: 86%

First Gamesa G8X-2 MW turbines assembling in Inner Mongolia

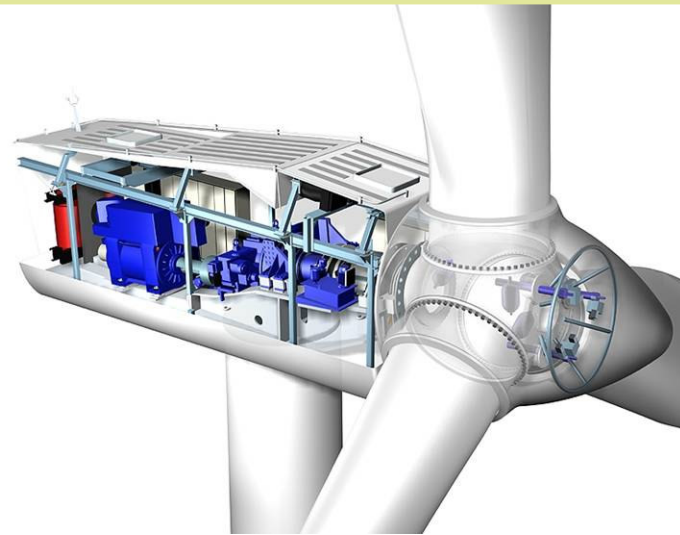


Products offered in China: today and the future

G5X-850 kW – OVER 2,000 SOLD



G8X – 2.0 MW



GRADUAL ROLLOUT OF OTHER GAMESA TURBINE SYSTEMS

- o G9X – 2.0 MW: model G97 Class III for low-wind conditions
- o G10X – 4.5 MW
- o Offshore systems



Gamesa G9X-2.0 MW



Gamesa G10X-4.5 MW

Actively localizing our technology to meet China's needs

-
- New generation control system: WindNet
 - Meets China power grid access regulations
 - Experienced in coastal typhoon regions
 - Approved G90 could be used for the wind sites in intertidal zones

Gamesa G5X-850 kW machines in ultra cold weather

PRODUCT FEATURES

Low temp

LT version: reaches -30°C at full power

Simaodingzi (China)

40 x G58 – 850 kW
LT version
First units installed in 2008



Gamesa G5X-850 kW machines at high altitude

PRODUCT FEATURES

LOW TEMPERATURE

Up to 2,500 m osl

Huitengxile and Chongli WF

90 + 67 x G52-850 kW
WF situated at + 2,000 m osl
First units installed in 2007



Gamesa G5X-850 kW machines in harsh conditions

PRODUCT FEATURES

CORROSIVE AND DUSTY SITES

HC and hd versions for desert and coastal sites

Fujian Zhampu

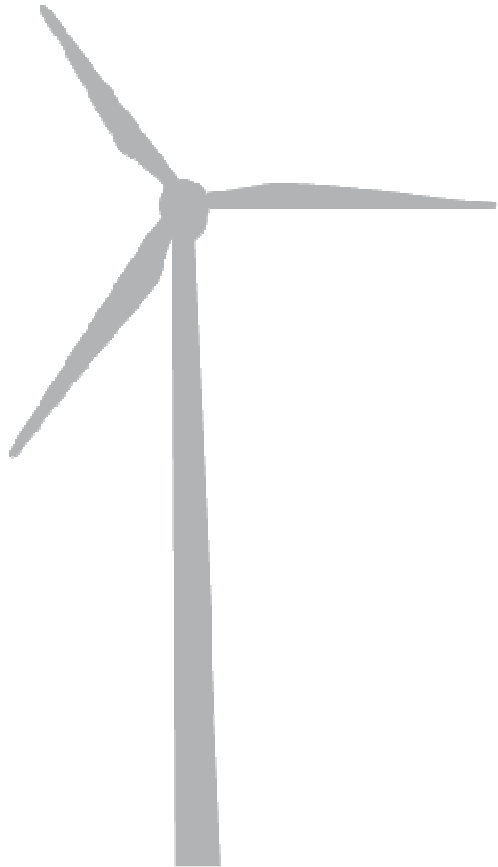
36 x G52-850 kW
First units installed in 2004

Fujian Putian Nanri I, II and III

19 + 57 x G52-850 kW
First units installed in 2005



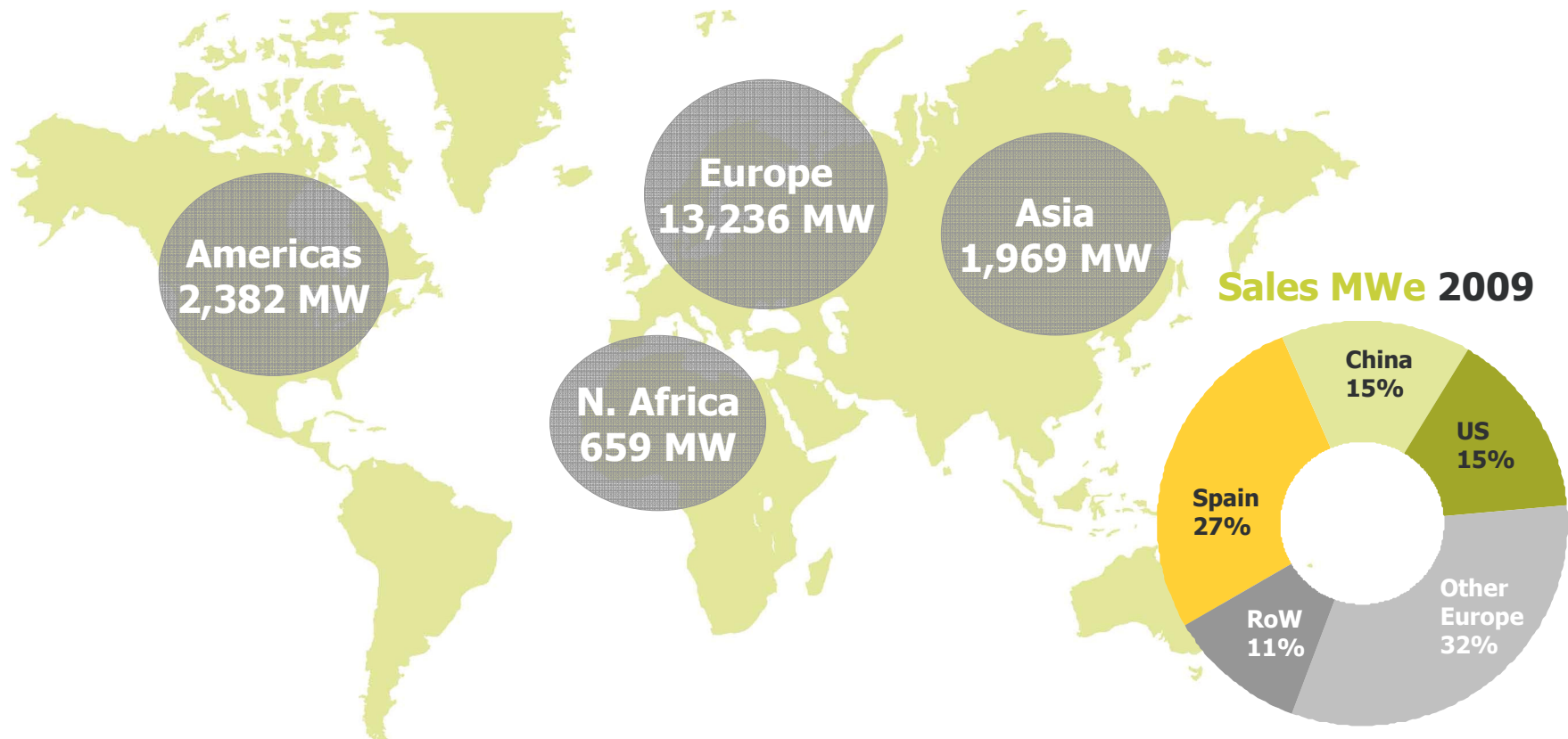
Gamesa: Global technology, everlasting energy



Global Gamesa

Productive and sales bases in main markets

Cumulative capacity, at year-end 2009: over 18,000 MW

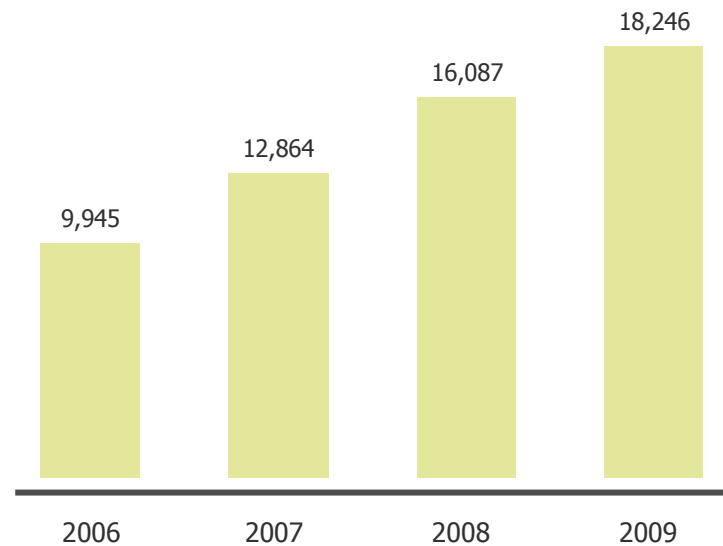


Global Gamesa

- Our activities are crucial in the fight against climate change, where China is a global leader as well
- More than 18,000 MW have been installed since 1998 which has eliminated 27 million tons of CO2 emissions / year

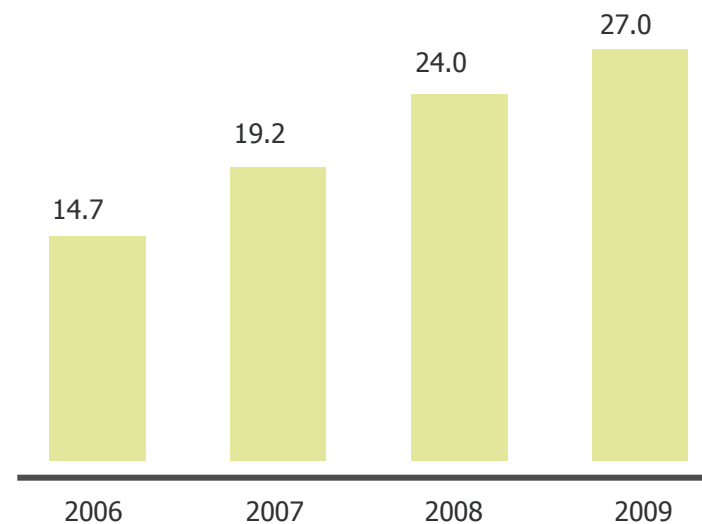
MW INSTALLED

ACCUMULATED FIGURES



GREENHOUSE GAS EMISSIONS

MILLIONS OF TONNES OF CO2 AVOIDED PER MW INSTALLED



Global Gamesa 09

Productive and sales bases in main markets

AMERICA

Manufacturing plants
2 in Pennsylvania

Components
**Blades
Nacelle assembly**

Manufacturing capacity
> 1.200 MW

Europa

Manufacturing plants
23 in Spain

Components
**Complete design
and fabrication**

Manufacturing capacity
> 2.200 MW

Asia

Manufacturing plants
**4 in China
1 in India**

Components
**Blades, nacelle
assembly, gearbox,
generators**

Manufacturing capacity
1.000 MW

Growth strategy strengthened with new product capacity in China, India and USA

Global Gamesa

Reliable partner, supplying major players in the wind industry



Global Gamesa

For tackling a new market and maximising growth



New commercial approach to deliver top line growth

- Opening new markets
- Reaching to new client segments
- Boosting operation and maintenance services



Increasing the competitiveness of our product portfolio

- 2 new products for low and medium class winds
- 1 new product platform: G10X – 4,5 MW
- 1 new business segment - Offshore



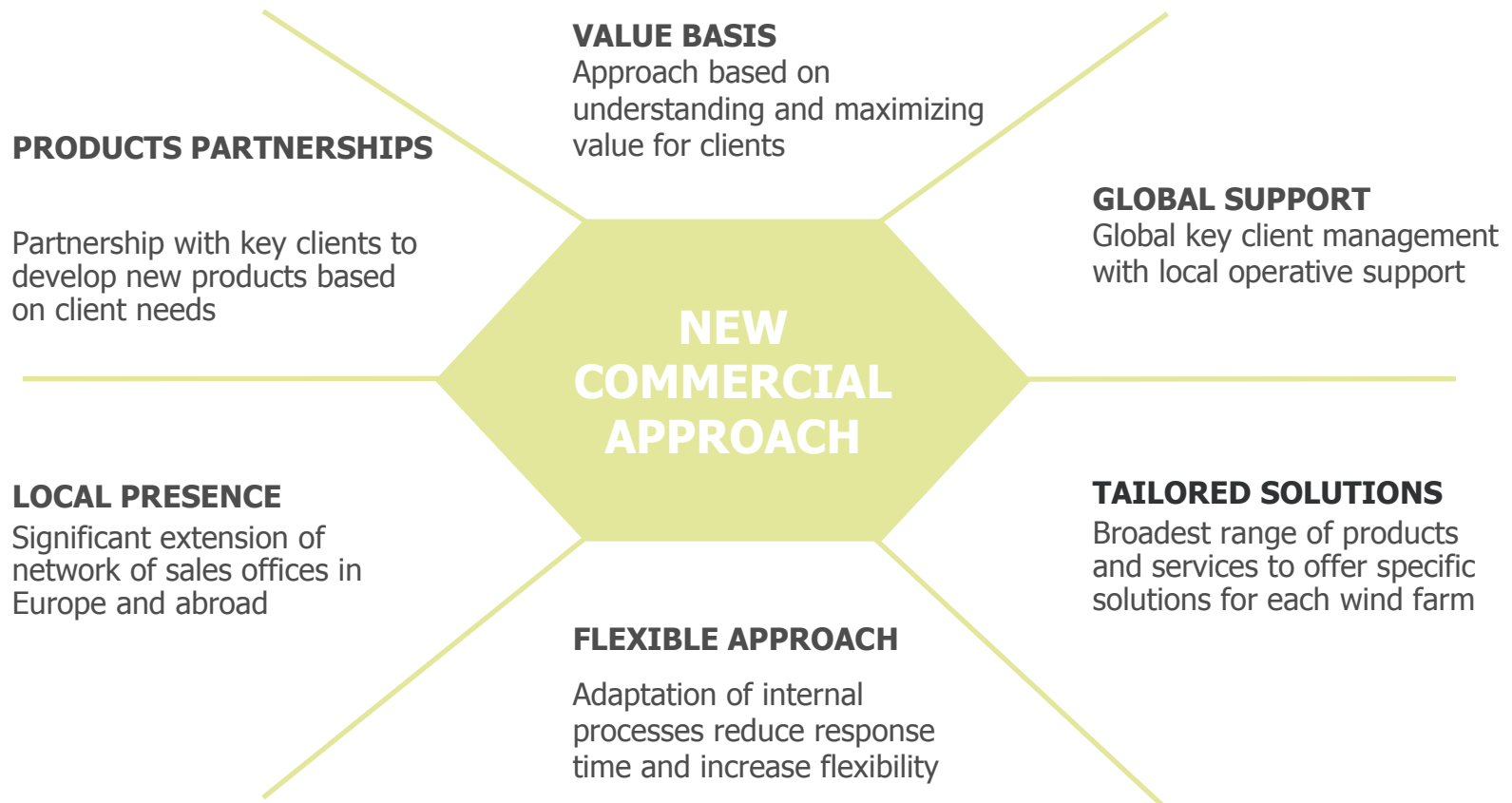
Continuous cost optimization programme to deliver increasing margins beyond 2010



Adjusting our flexible production capacity

Global Gamesa

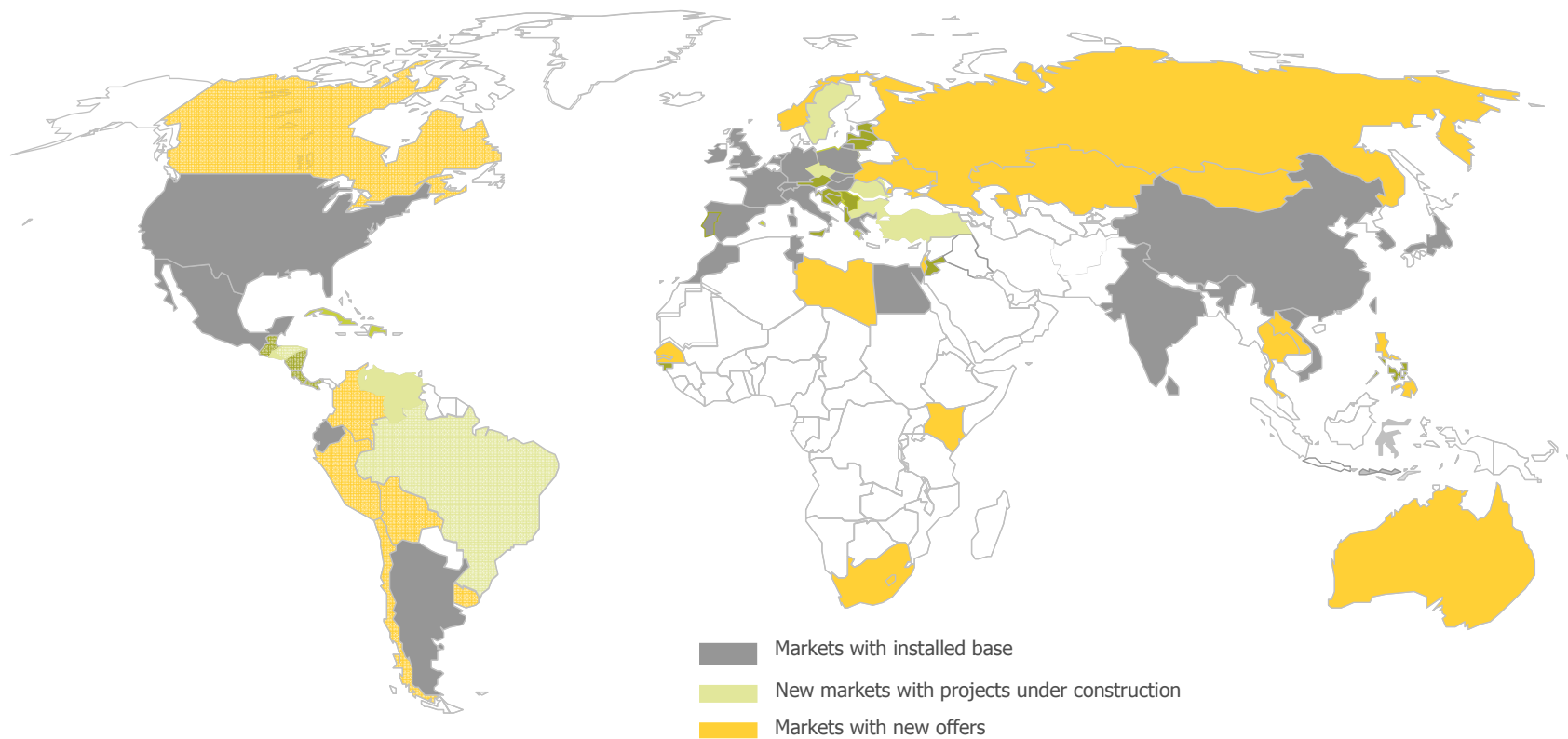
New commercial approach



Opening new markets

Global presence and solutions

Target: x 2 sales network, x 3 MW supplied and x 4 commercial bids



New product launches

Targeting the best productivity across the wind range

| New Product | Rotor Diameter | Rated Capacity | IEC Class |
|-------------|----------------|----------------|-----------|
| G58 | 58 | 0,85 MW | IIA |
| G90 | 90 | 2,0 MW | IIA |
| G97 | 97 | 2,0 MW | IIIA |
| G128 | 128 | 4,5 MW | IIA |
| G136 | 136 | + 4,0 MW | IIIA |

Launching two new products across medium and low speed winds in the next business cycle

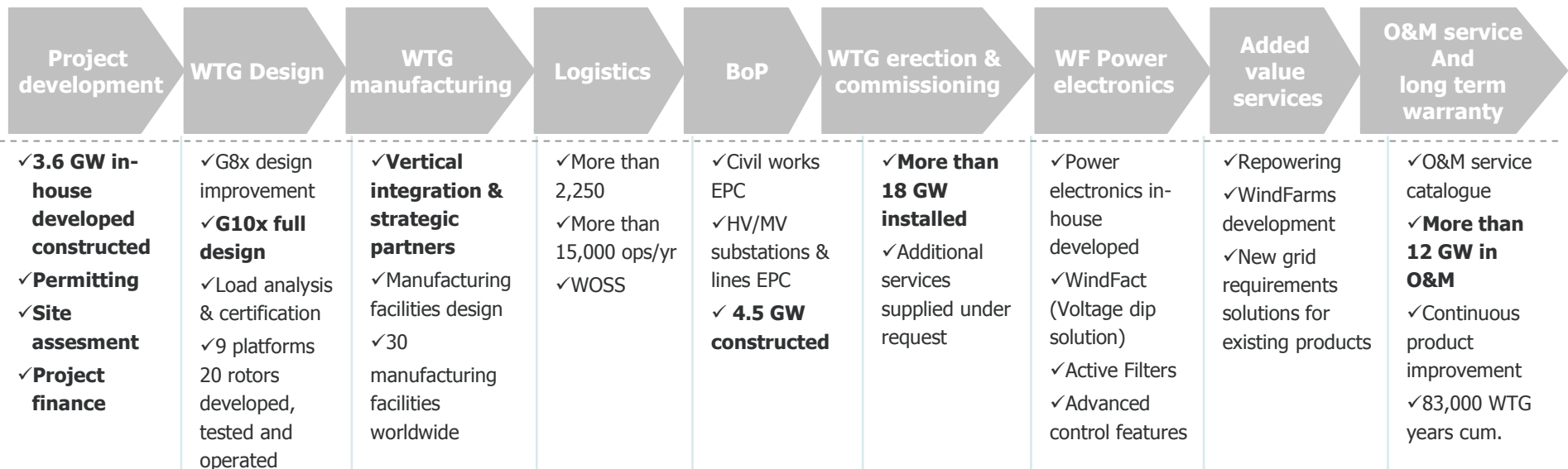
A full new product platform: G10X-4.5 MW

A new segment: offshore wind business

Leader in the development and sale of wind farms

Gamesa is a highly experienced partner all along the wind farm value chain

- 3 Gamesa models among the top 10 installed WTG (Fuente: Sun & Wind Energy 5/2009)
- 3,600 MW in-house developed & constructed
- > 18,000 MW installed
- > 12,000 MW maintained

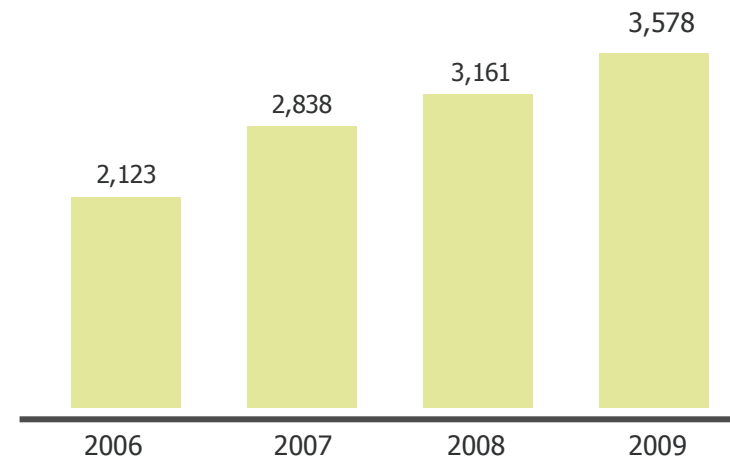


Leader in the development and sale of wind farms

- Global portfolio of over 22,000 MW
- Leading international wind farm developer with activities in 15 countries across 3 continents
- Strategically positioned in the three main wind power markets: Europe, USA and China

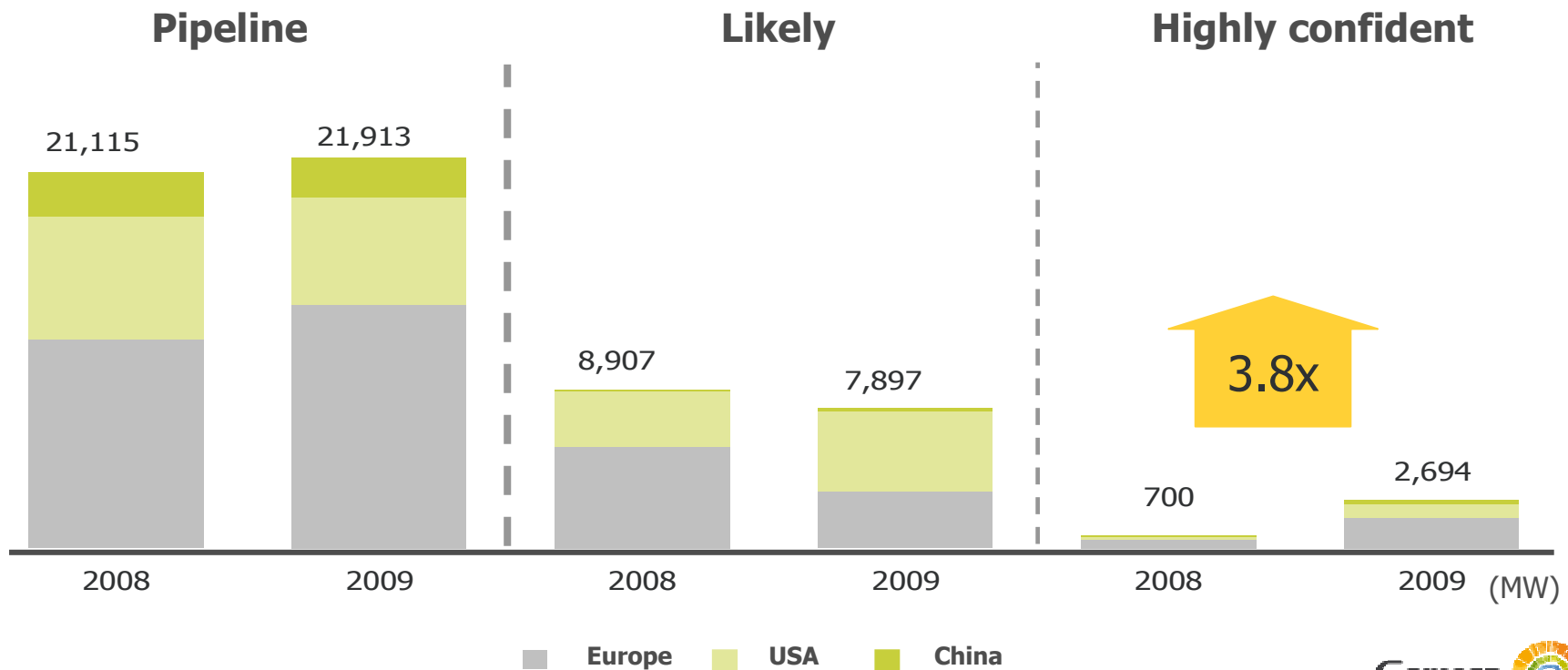
WIND FARMS DEVELOPED

MW ACCUMULATED



Wind farm pipeline development

Globally, 22 GW pipeline with significant projects in the last stages of development



Socially responsible

Committed sustainable development and environment



Included in the leading sustainability indexes



FTSE4Good



S&P Global Clean Energy Index



Gamesa China

Committed to Developing the Wind Industry

Shanghai, 14th September 2010

