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## P R E S S   R E L E A S E

### **Global wind energy markets continue to boom – 2006 another record year**

#### ***Industry delivered 32% of annual market growth despite supply chain difficulties***

**Brussels, 2 February 2007.** The booming wind energy markets around the world exceeded expectations in 2006, with the sector experiencing yet another record year. On the day of the publication of the 4<sup>th</sup> Assessment Report on Climate Change by the IPCC, the Global Wind Energy Council (GWEC) released its annual figures for 2006. These figures, which include wind energy developments in more than 70 countries around the world, show that the year saw the installation of 15,197 megawatts (MW), taking the total installed wind energy capacity to 74,223 MW, up from 59,091 MW in 2005.

Despite constraints facing supply chains for wind turbines, the annual market for wind continued to increase at the staggering rate of 32% following the 2005 record year, in which the market grew by 41%. This development shows that the global wind energy industry is responding fast to the challenge of manufacturing at the required level, and manages to deliver sustained growth.

In terms of economic value, the wind energy sector has now become firmly installed as one of the important players in the energy markets, with the total value of new generating equipment installed in 2006 reaching €18 billion, or US\$23 billion.

The countries with the highest total installed capacity are Germany (20,621 MW), Spain (11,615 MW), the USA (11,603 MW), India (6,270 MW) and Denmark (3,136). Thirteen countries around the world can now be counted among those with over 1000 MW of wind capacity, with France and Canada reaching this threshold in 2006.

In terms of new installed capacity in 2006, the US continued to lead with 2,454 MW, followed by Germany (2,233 MW), India (1,840 MW), Spain (1,587 MW), China (1,347 MW) and France (810 MW). This development shows that new players such as France and China are gaining ground.

"The tremendous growth in 2006 shows that decision makers are starting to take seriously the benefits that wind energy development can bring. However, we must not forget that wind energy is a new technology that needs robust policy frameworks and political commitment to fulfill its full potential," said Arthouros Zervos, Chairman of GWEC.

Europe is still leading the market with 48,545 MW of installed capacity at the end of 2006, representing 65% of the global total. In 2006, the European wind capacity grew by 19%, producing approximately 100 TWh of electricity, equal to 3.3% of total EU electricity consumption in an average wind year.

"While Germany and Spain still represent 50% of the EU market, we are seeing a healthy trend towards less reliance on these two countries. In the EU, 3,755 MW were installed outside of Germany, Spain and Denmark in 2006. In 2002, this figure still stood at only 680 MW," said Christian Kjaer, the

European Wind Energy Association's (EWEA) CEO. "The figures clearly confirm that a second wave of European countries is investing in wind power."

Despite the continuing growth in Europe, the general trend shows that the sector is gradually becoming less reliant on a few key markets, and other regions are starting to catch up with Europe. The growth in the European market in 2006 accounted for about half of the total new capacity, down from nearly three quarters in 2004.

Asia has experienced the strongest increase in installed capacity outside of Europe, with an addition of 3,679 MW, taking the continent over 10,600 MW. In 2006, the continent grew by 53% and accounted for 24% of new installations. The strongest market here remains India with over 1,840 MW of new installed capacity, which takes its total figure up to 6,270 MW.

China more than doubled its total installed capacity by installing 1,347 MW of wind energy in 2006, a 70% increase from last year's figure. This brings China up to 2,604 MW of capacity, making it the sixth largest market world wide. The Chinese market was boosted by the country's new Renewable Energy Law, which entered into force on 1 January 2006.

"Thanks to the Renewable Energy law, the Chinese market has grown substantially in 2006, and this growth is expected to continue and speed up. According to the list of approved projects and those under construction, more than 1,500 MW will be installed in 2007. The goal for wind power in China by the end of 2010 is 5,000 MW, which according to our estimations will already be reached well ahead of time," said Li Junfeng of the Chinese Renewable Energy Industry Association (CREIA).

22% of the world's new wind capacity was installed in North America, where the annual market increased by a third in 2005, gaining momentum in both the US and Canada.

For the second year running, the US wind energy industry installed nearly 2,500 MW, making it the country with the most new wind power.

"Strong growth figures in the US prove that wind is now a mainstream option for new power generation," said Randy Swisher, President of the American Wind Energy Association (AWEA). "Wind's exponential growth reflects the nation's increasing demand for clean, safe and domestic energy, and continues to attract both private and public sources of capital. New generating capacity worth US\$4 billion was installed in 2006, billing wind as one of the largest sources of new power generation in the country – second only to natural gas – for the second year in a row."

Canada also had a record year, with the installed capacity more than doubling from 683 MW in 2005 to 1459 MW at the end of 2006. "Wind energy is an emerging Canadian success story and 2006 will be remembered as the year that our country first began to seriously capture its economic and environmental benefits," said Robert Hornung, President of the Canadian Wind Energy Association (CanWEA). "Canada's is on the cusp of a wind energy boom as provincial governments are now targeting to have a minimum of 10,000 MW of installed wind energy capacity in place by 2015."

Growth in the relatively young African and Middle Eastern market picked up considerably in 2006, with 172 MW of new installed capacity, bringing the total up to 441 MW. This represents a 63% growth, and should be seen as a promising signs for future developments. The main countries experiencing growth are Egypt (230 MW, up from 145 MW), Morocco (124 MW, up from 64 MW) and Iran (48 MW, up from 23 MW).

Compared to previous years, the Australian market only experienced slow growth in 2006. "While 2006 saw only 109 MW installed bring total capacity to 817 MW, the Australian market has been given a new lease of life with the introduction of state based renewable energy targets providing a more positive outlook for 2007," said Dominique La Fontaine, CEO of the Australian Wind Energy Association (Auswind).

"As security of energy supply and climate change are ranging high on the political agendas of the world's governments, wind energy has already become a mainstream energy source in many countries around the world. Wind energy is clean and fuel-free, which makes it the most attractive solution to the world's energy challenges," said Arthouros Zervos, Chairman of GWEC.

**NOTES TO THE EDITOR:**

(1) Global Wind Energy Council (GWEC) – [www.gwec.net](http://www.gwec.net)

GWEC is the global forum for the wind energy sector, uniting the wind industry and its representative associations.

The member associations of GWEC operate in more than fifty countries and represent:

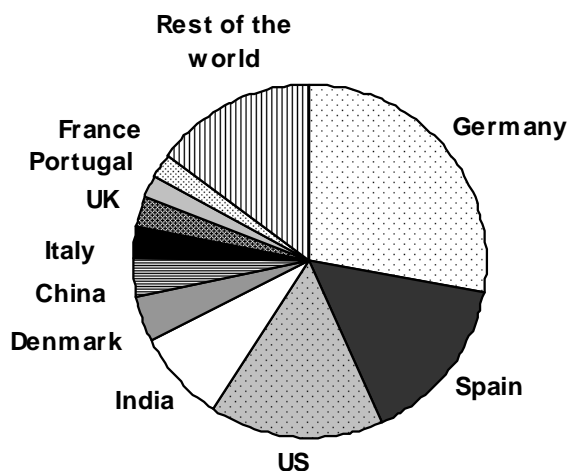
- Over 1,500 companies, organisations and institutions
- All the world’s major wind turbine manufacturers
- 99% of the world ’s more than 73,000 MW of installed wind power capacity

The following organisations are Members of the GWEC Board:

- Acciona Energía
- Airtricity
- Associazione Nazionale Energia del Vento (ANEV)
- Australian Wind Energy Association (AusWind)
- American Wind Energy Association (AWEA)
- Bundesverband Windenergie (BWE)
- Canadian Wind Energy Association (CanWEA)
- Chinese Renewable Energy Industries Association (CREIA)
- European Wind Energy Association (EWEA)
- Gamesa
- Garrad Hassan
- GE Wind Energy
- Hansen Transmissions
- Iberdrola
- Indian Wind Turbine Manufacturers Association (IWTMA)
- Japanese Wind Energy Association (JWEA)
- LM Glasfiber
- Nordex AG
- Renewable Energy Systems (RES)
- Shell WindEnergy
- Siemens Wind
- Suzlon Energy
- Vestas Wind Systems

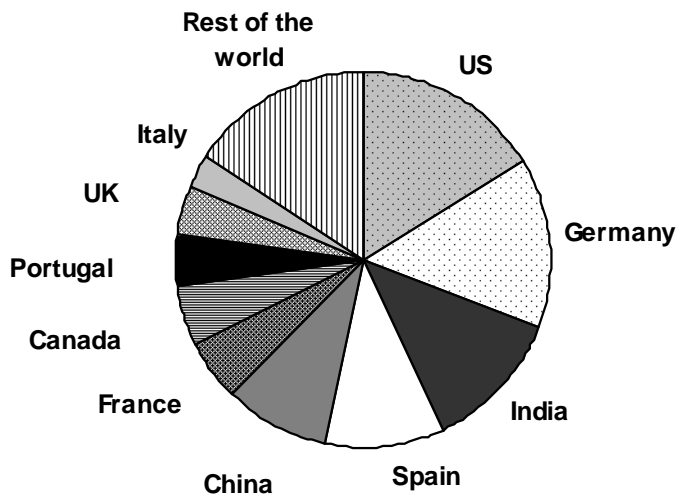
**ANNEX**

**Top 10 cumulative installed capacity (Dec. 2006)**



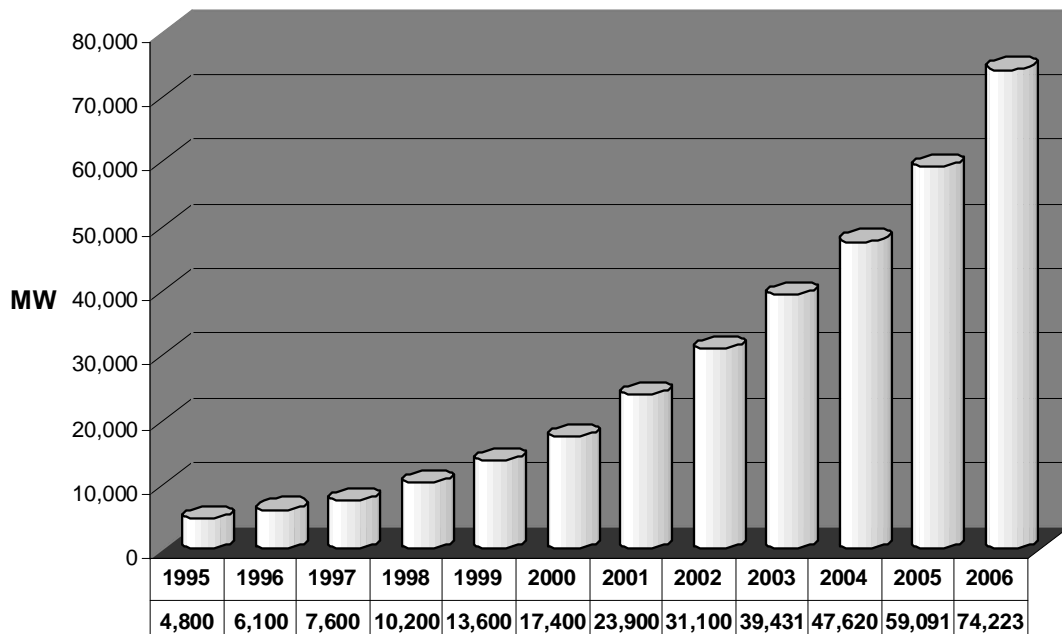
Total capacity	MW	Market share
Germany	20,622	27.8%
Spain	11,615	15.6%
US	11,603	15.6%
India	6,270	8.4%
Denmark	3,136	4.2%
China	2,604	3.5%
Italy	2,123	2.9%
UK	1,963	2.6%
Portugal	1,716	2.3%
France	1,567	2.1%
<b>Top 10 - Total</b>	<b>63,217</b>	<b>85.2%</b>
<b>Rest of the World</b>	<b>11,004</b>	<b>14.8%</b>
<b>World total</b>	<b>74,221</b>	

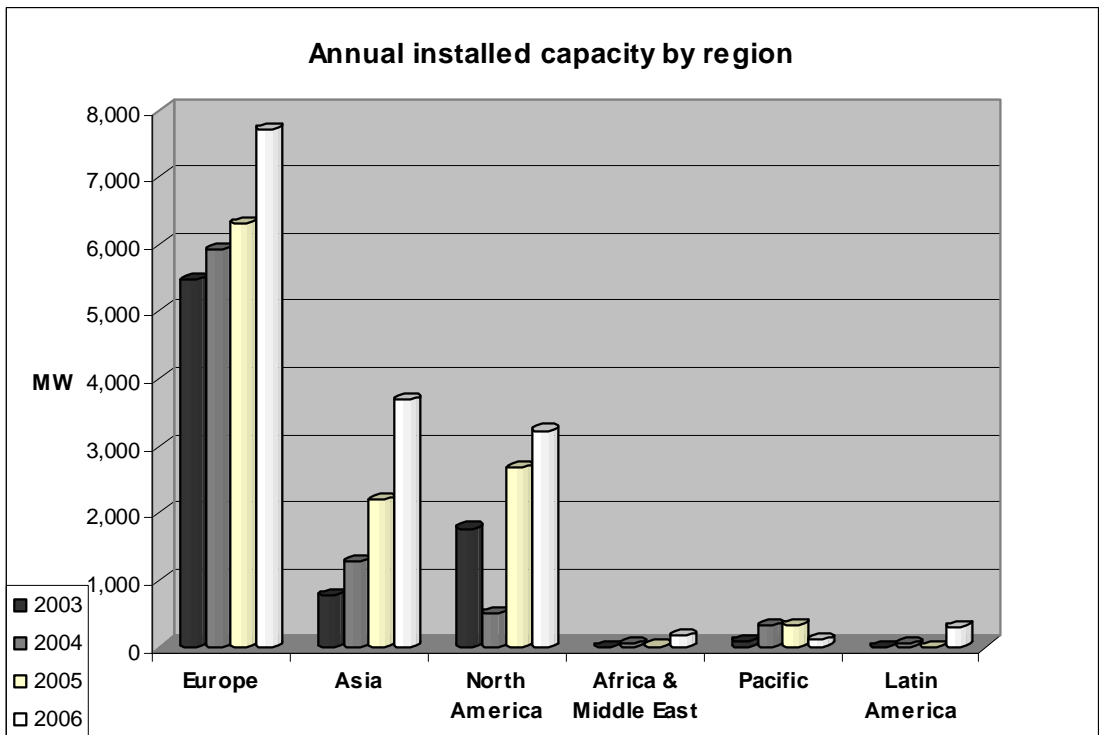
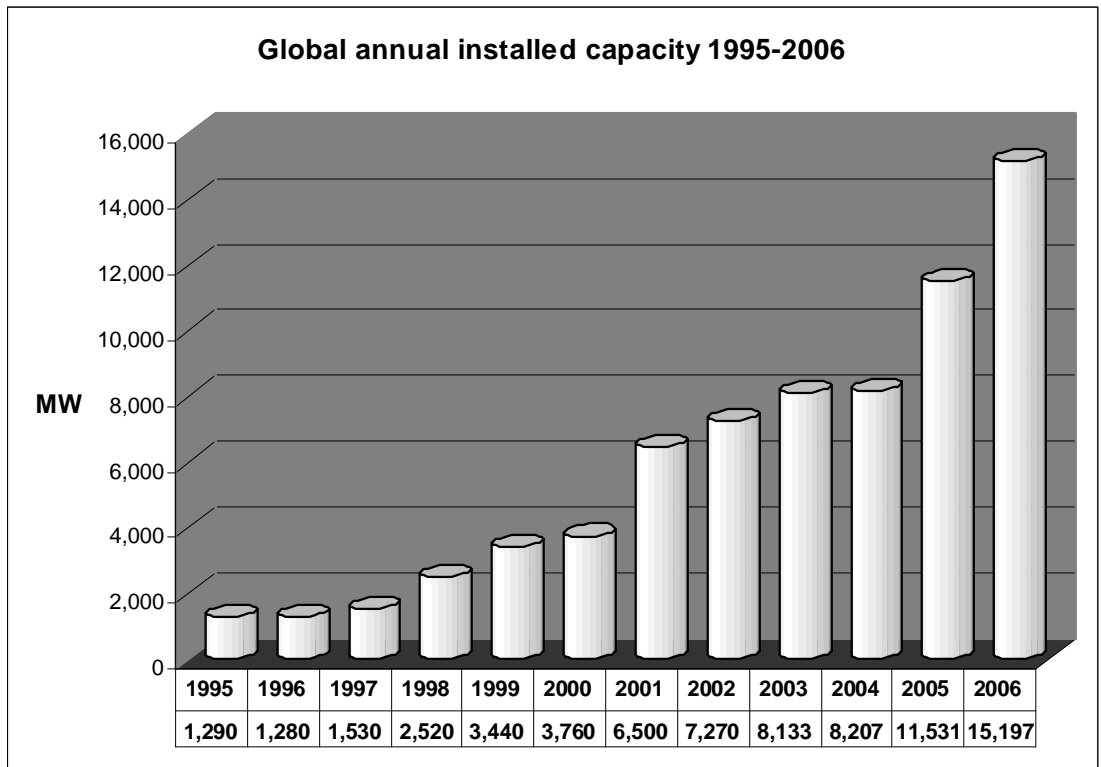
**Top 10 new installed capacity  
(Jan.-Dec. 2006)**



New capacity	MW	Market share
US	2,454	16.1%
Germany	2,233	14.7%
India	1,840	12.1%
Spain	1,587	10.4%
China	1,347	8.9%
France	810	5.3%
Canada	776	5.1%
Portugal	694	4.6%
UK	634	4.2%
Italy	417	2.7%
<b>Top 10 – Total</b>	<b>12,792</b>	<b>84.2%</b>
<b>Rest of the world</b>	<b>2,405</b>	<b>15.8%</b>
<b>World total</b>	<b>15,197</b>	

**Global cumulative installed capacity 1995-2006**





## GLOBAL INSTALLED WIND POWER CAPACITY (MW) – Regional Distribution

Africa & Middle East	Total end 2005	New 2006	Total end 2006
Egypt	145	85	230
Morocco	64	60	124
Iran	23	27	48
Tunisia	20	0	20
Other (1)	11	0	11
<b>Total</b>	<b>271</b>	<b>172</b>	<b>441</b>

Asia			
India	4,430	1,840	6,270
China	1,260	1,347	2,604
Japan	1,061	333	1,394
Taiwan	104	84	188
South Korea	98	75	173
Philippines	25	0	25
Other (2)	13	0	13
<b>Total</b>	<b>6,990</b>	<b>3,679</b>	<b>10,667</b>

Europe			
Germany	18,415	2,233	20,622
Spain	10,028	1,587	11,615
Denmark	3,128	12	3,136
Italy	1,718	417	2,123
UK	1,332	634	1,963
Portugal	1,022	694	1,716
France	757	810	1,567
Netherlands	1,219	356	1,560
Austria	819	146	965
Greece	573	173	746
Ireland	496	250	745
Sweden	510	62	572
Norway	267	47	314
Belgium	167	26	193
Poland	83	69	153
Rest of Europe (3)	364	192	556
<b>Total Europe</b>	<b>40,898</b>	<b>7,708</b>	<b>48,545</b>
<i>out of which EU-27 (4)</i>	<i>40,512</i>	<i>7,611</i>	<i>48,062</i>

Latin America & Caribbean			
Brazil	29	208	237
Mexico	3	85	88
Costa Rica	71	3	74
Caribbean (w/o Jamaica)	35	-	35
Argentina	27	-	27
Colombia	20	-	20
Jamaica	20	-	20
Other (5)	7	-	7
<b>Total</b>	<b>212</b>	<b>296</b>	<b>508</b>

North America			
USA	9,149	2,454	11,603
Canada	683	776	1,459
<b>Total</b>	<b>9,832</b>	<b>3,230</b>	<b>13,062</b>

Pacific Region			
Australia	708	109	817
New Zealand	169	3	171
Pacific Islands	12	-	12
<b>Total</b>	<b>889</b>	<b>112</b>	<b>1,000</b>

<b>World total</b>	<b>59,091</b>	<b>15,197</b>	<b>74,223</b>
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Source: GWEC

(1) Cape Verde, Israel, Jordan, Nigeria, South Africa

(2) Bangladesh, Indonesia, Sri Lanka, Russia;

(3) Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, Faroe Islands, Hungary, Iceland, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Romania, Slovakia, Slovenia, Switzerland, Turkey, Ukraine; Source: EWEA

(4) Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom; Source: EWEA [www.ewea.org](http://www.ewea.org)

(5) Chile, Cuba, Mexico.

Please note: project decommissioning of 65 MW and rounding affect the final sums