



World Wind Energy Association

Press Release

Worldwide Wind Energy Capacity at 47.616 MW – 8.321 MW added in 2004

Spain, Germany and India are leading markets – Australia- Pacific shows highest growth rate

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Bonn/Melbourne/New Delhi (WWEA) – The world market for electricity generation from wind energy once again developed very dynamically in the year 2004. 8.321 MW of new capacity were added in the year 2004, marking a new record – in 2003, 8.129 MW were added.

The new leader in terms of new installation is Spain with 2061 MW, thus for the first time taking over the number one position from Germany (2020 MW). Germany, however, remains the leading country in terms of overall capacity representing one third of the global wind energy installations. India has established itself as the third biggest wind energy market worldwide in terms of new installations (875 MW). The Asian country is expected within soon to get ahead of the former pioneer country Denmark – with an increase of only 7 MW – and become number four also in terms of total capacity. The Australian-Pacific region showed the highest growth rates of all continents: the installed capacity reached 547 MW compared with 233 MW in 2003, equalling a growth rate of 135 %.

However, the global rate of growth fell from 26 % in the year 2003 down to 21 %. This is due to the fact that the wind industry has lost momentum especially in the former traditional core markets Denmark, USA and, to a lesser extend, Germany.

Geographical diversification strengthens the wind industry

In the year 2004, a clear diversification process can be observed concerning the distribution of the new market shares. Whilst in 2003 only ten countries had new installations of more than 100 MW, in 2004 19 countries added more than 100 MW. It can still be stated that the five leading markets – Germany, Spain, USA, Denmark and India – are dominating the overall market with current installations of 37,7 GW. However, their share dropped in 2004 from 82 % to 79 %. In terms of additional capacity, the share of the top five markets (5.337 MW) reached 64 % of the world market, after 79 % in 2003.

This diversification process will broaden the international basis of the wind industry and strengthen the domestic capacities in many parts of the world. Thus an even stronger and more dynamic development of the worldwide wind energy utilisation can be expected in the next future.

Europe

Europe remains by far the leading continent in terms of installed capacity with 34,6 GW (72,7 % of the world's capacity). Germany lost its number one position in Europe and worldwide for the first time since more than a decade ago when it took the lead from Denmark. Spain, after the introduction of the improved legislation in 2004, has become the leading wind market in terms of additional capacity and represents now one sixth of the worldwide wind capacity (8.263 MW). Many medium-sized markets bigger than 100 MW emerged in Europe in the past year. The highest growth rates (bigger than 50 %) amongst these medium European markets could be seen in Norway, Ireland, Portugal and France.

America

The American continent represented 7.336 MW or 15,4 % of the global wind capacity. In North America, the US market, after a record year in 2003, slowed down in 2004 due to the delay in the prolongation of the production tax credit with an additional capacity of only 370 MW (growth rate of only 5,8 %) after 1685 MW in 2003; thus, the US have lost the number two position in overall capacity to Spain and have even been topped by Japan in terms of new capacity. Canada has kept well its position and had a growth rate of 38 % (122 MW added). However, the US market after the prolongation of the production tax credit (for two years) is expected to show significant growth rates in 2005.

No single Latin American country is represented any more amongst the top 20 wind markets. Brazil, however, is expected to start a dynamic development and substantial increase in the years 2006-2007 with the Proinfa programme to be implemented.

Asia

Asia represented 4.726 MW or 9,9 % of the global wind energy market in 2004 (in 2003, the share was at 8,2 %). India once again is the leading wind energy market on the Asian continent with additional capacity of 875 MW and a growth rate of 42 %. Amongst the leading countries in Asia there are Japan (896 MW), which had the highest growth rate in Asia (77,1 %) amongst the major Asian markets, and China (764 MW), which after the World Wind Energy Conference 2004 and the recent approval of the renewable energy legislation is expected to have substantial further growth in the near future. Interesting to mention that Japan with an additional capacity of 390 MW has topped the United States and represented the fourth largest wind energy market worldwide in terms of new installations. Another interesting market in the coming years is going to be Pakistan where the government has approved an ambitious wind energy programme.

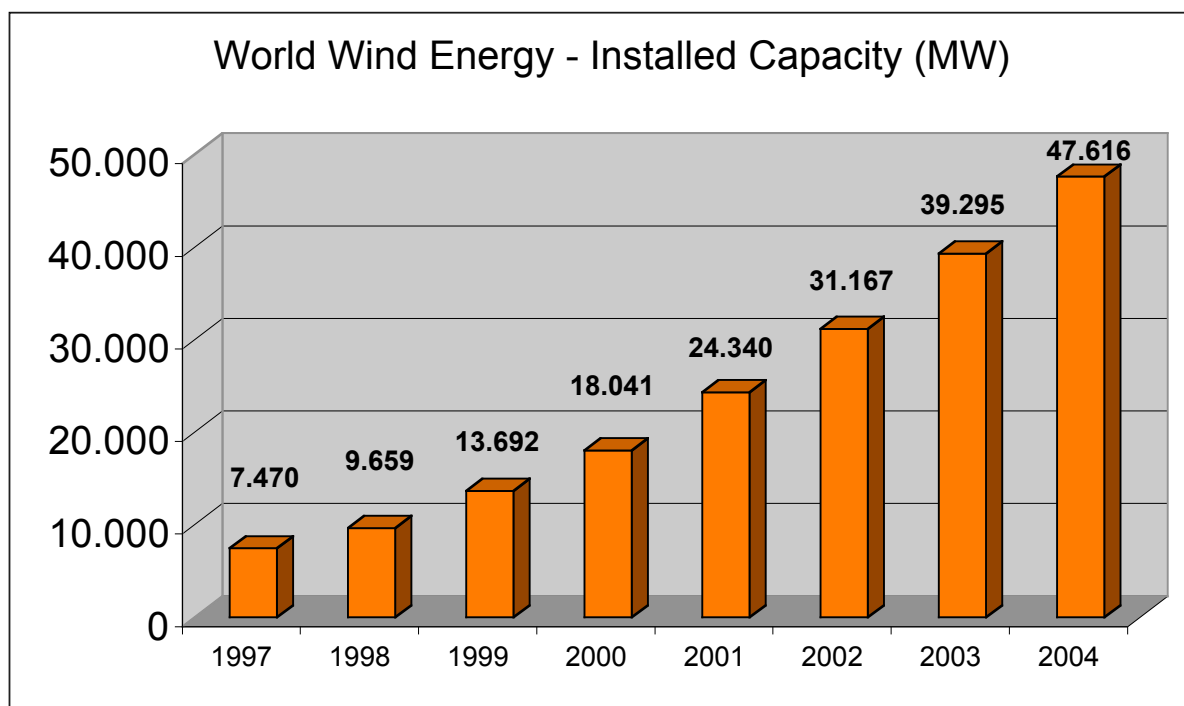
Australia/Pacific

The Australia/Pacific region has been the most dynamical region worldwide in 2004. Australia as well as New Zealand were the markets with the highest global growth rates with Australia almost doubling (from 197 MW up to 379 MW) and New Zealand more than quadrupling (from 36 MW up to 168 MW) their installed capacity. Together, both countries had installed 547 MW compared with 233 MW in 2003 – equalling a growth rate of 135 %. The World Wind Energy Conference 2005 in Melbourne will discuss how to continue and extend this dynamic development of the wind industry in the region – and beyond.

Africa

In Africa 392 MW were installed by the end of 2004. Egypt was able to keep its position as number one wind country on the African continent with current total installations of 300 MW. Only little progress was made in the rest of the African countries, however, new installations are expected in the near future in Morocco, Egypt, Tunisia and South Africa.

Considering the huge need for a sustainable energy supply in many African countries, development strategies including stand-alone applications have to be developed and implemented as soon as possible in order to harvest the enormous wind potentials for the benefit of the African people of which a minor share has access to a public grid.



Worldwide wind energy installation figures per continent as at 31 December 2004

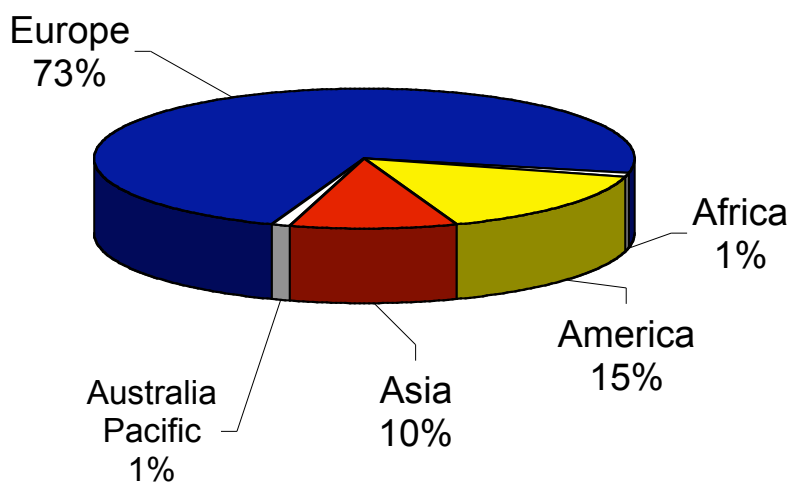
	Installed Capacity 2004 (MW)	Installed Capacity 2003 (MW)	World market share in 2004 [%]	World market share in 2003 [%]
Africa	391,7	271,5	0,8	0,7
America	7.335,5	6.842,6	15,4	17,4
Asia	4.726,0	3.217,6	9,9	8,2
AustraliaPacific	546,9	233,5	1,1	0,6
Europe	34.616,4	28.730,2	72,7	73,1
World	47.616,4	39.295,3	100,0	100,0

Worldwide wind energy installation figures per country as at 31 December 2004

Country	Additional Capacity in 2004 [MW]	Rate of Growth in 2004 [%]	Total Capacity installed end 2004 [MW]
Germany	2019,7	13,8	16.628,8
Spain	2061,0	33,2	8.263,0
USA	370,0	5,8	6.740,0
Denmark	7,0	0,2	3.117,0
India	875,0	41,5	2.985,0
Italy	221,0	24,4	1.125,0
The Netherlands	170,0	18,7	1.078,0
Japan	390,2	77,1	896,2
United Kingdom	240,0	37,0	888,0
China	197,0	34,7	764,0
Austria	191,0	46,0	606,0
Portugal	223,0	74,6	522,0
Greece	124,0	34,0	489,0
Canada	122,0	37,9	444,0
Sweden	43,0	10,8	442,0
France	138,0	55,6	386,0
Australia	181,8	92,2	379,0
Ireland	152,9	82,2	338,9
Egypt	120,0	66,7	300,0
Norway	176,0	176,0	276,0
New Zealand	131,6	362,5	167,9
Belgium	27,0	39,7	95,0
Finland	29,5	57,8	80,5
Costa Rica	0,0	0,0	79,0
Ukraine	12,2	21,6	68,6
Korea	48,3	209,3	68,4
Poland	6,0	10,5	63,0
Morocco	0,0	0,0	53,9
Luxembourg	13,0	59,1	35,0
Argentina	0,9	3,5	26,6
Latvia	2,0	8,3	26,0
Brazil	0,0	0,0	23,8
Turkey	0,0	0,0	20,6
Colombia	0,0	0,0	19,5
Tunisia	0,0	0,0	19,0
Czech Republic	7,0	70,0	17,0
South Africa	0,2	1,2	16,6
Iran	0,0	0,0	11,0
Russia	0,0	0,0	10,8
Switzerland	3,7	69,8	9,0
Lithuania	5,0	250,0	7,0
Croatia	6,0	–	6,0
Estonia	3,0	100,0	6,0
Slovakia	3,0	150,0	5,0
Hungary	1,2	60,5	3,3
Nigeria	0,0	0,0	2,2
Cyprus	0,0	0,0	2,0
Chile	0,0	0,0	2,0
Syria	0,0	0,0	1,45
Romania	0,0	0,0	1,0
Bulgaria	1,0	–	1,0
Cuba	0,0	0,0	0,45
Uruguay	0,0	0,0	0,15
World	8.321	21,2	47.616,4

Source: WWEA member survey and own research, sources available on request.

Wind Energy – Installed Capacity by Continent 2004 (total: 47,6 GW)



For further information please contact:

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The World Wind Energy Association: Basic information

WWEA is the global voice for wind energy representing wind energy organisations from all continents. Currently, WWEA has more than 170 members from 70 countries, most of them national associations, scientific institutes and companies. WWEA works for the complete substitution of fossil and nuclear sources by renewable energies with wind energy as one cornerstone by

- providing a platform for the communication of all wind energy actors world-wide,
- influencing national and international policies,
- providing international technology transfer.

The WWEA Head Office is situated in Bonn/Germany close to the future UN Campus.

Further information: www.wwindea.org

WWEA Events:

4th World Wind Energy Conference & Renewable Energy Exhibition

Melbourne, Australia, 2-5 November 2005:

Organised by WWEA jointly with Renewable Energy Generators Australia.

Further information: www.wwec2005.com

5th World Wind Energy Conference & Renewable Energy Exhibition

Mumbai, India, 2006:

Organised by WWEA jointly with the Indian Wind Energy Association.

Energy Hanover 2005

Hanover, Germany, 11-15 April 2005

Supported by the World Wind Energy Association

Further information: www.energy-hannover.de

HUSUMwind 2005

Husum, Germany, 20-24 September 2005

Supported by the World Wind Energy Association

Further information: www.husumwind.com