# The World Wind Energy Association





Half-year Report 2011



# **Worldwide Wind Energy Statistics**

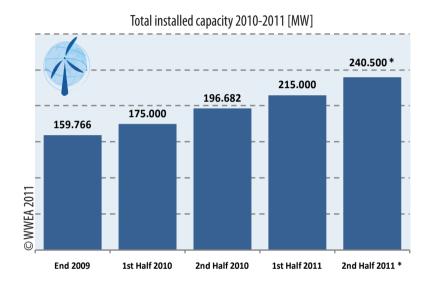
#### **General Situation**

## World market for wind energy gains momentum after a weak year in 2010:

- 18,4 GW of new installations in first half of 2011, 43,9 GW expected for the full year
- China confirms its role as global wind locomotive with a share of 43 %, adding 8 GW
- In June 2011, worldwide wind capacity reached 215 GW

The world market for wind energy saw a sound revival in the first half of 2011 and re-gained momentum after a weak year in 2010: The world-wide wind capacity reached 215'000 MW by the end of June 2011, out of which 18'405 MW were added in the first six months of 2011. This increase represents 15 % more than in the first half of 2010, when only 16'000 MW were added.

The global wind capacity grew by 9,3 % within six months and by 22,9 % on an annual basis (mid-2011 compared with mid-2010). In comparison, the annual growth rate in 2010 was 23,6 %.



### Top 10 Wind Markets: China, USA, Germany, Spain, and India continue to lead

Still the five leading countries stand for the lion share of the world capacity of wind turbines: China, USA, Germany, Spain and India, together representing a total share of 74 % of the global wind capacity.

Again in 2011, China continues to dominate the world wind market, adding 8 GW in only 6 months, the highest number ever within the first half year. Within those 6 months, China accounted for 43 % of the world market for new wind turbines, compared with 50 % in the full year of 2010. By June 2011, China had an overall installed capacity of around 52 GW.

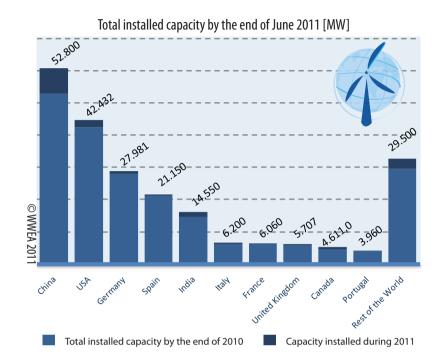
Most of the European markets showed stronger growth in 2011 than in the previous year: The top markets in Europe continue to be Germany with a new capacity of 766 MW and reaching a total of 27'981 MW, Spain (484 MW, 21'150 MW in total), Italy (460 MW, 6'200 MW total), France (400 MW, 6'060 MW total), the United Kingdom (504 MW, 5'707 MW) and Portugal (260 MW, 3'960 MW). Only France and Denmark showed a decrease in their new installed capacity compared to the first half of 2010 and Denmark even dropped out of the list of the top 10 markets, while Portugal became the new number 10.



#### **General Situation**

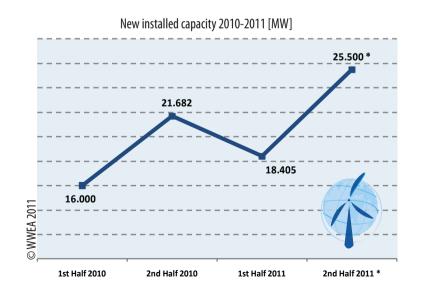
The US market added 2'252 MW between January and June 2011, about 90 % more than in the same, but very weak period of 2010. However, it is questionable whether the US market can regain the strength it had in 2009 when a total capacity of almost 10 GW was installed within one year.

Relatively strong growth can be observed in Canada which installed 603 MW during the first half of 2011, with Ontario as the strongest province due to the ground-breaking Green Energy Act.



#### New wind markets are arising

A number of new markets are arising around the world: During the first half of 2011, three countries were added to the list of countries that are using wind energy, increasing the number from 83 to 86: Venezuela, Honduras, and Ethiopia. Also the Dominican Republic installed its first major wind farm and increased its capacity from 0,2 MW to 60,2 MW.



Within Europe, again the emerging markets in Eastern Europe showed the highest growth from January to June 2011, e.g. Romania with 10 % growth (59 MW added), Poland with 22 % (245 MW added), Croatia with 28 % (20 MW added) and Estonia with 32 % (48 MW added).

A number of countries introduced new and ambitious legislation for wind power, including Ecuador, Japan, Malaysia and Uganda, which adopted systems of feed-in tariffs for the development of renewable energy.



## **World Wind Energy Association**

#### Prospects for end of the year 2011:

#### 240 GW of wind cover almost 3 % of the worldwide electricity demand

In the second half of 2011, an additional capacity of 25′500 MW is expected to be erected worldwide, which would bring new annual installations to 43′900 MW, compared with 37′642 MW in the year 2010. The total installed wind capacity is projected to reach 240′500 MW by the end of this year. This capacity can cover almost 3 % of the electricity demand all over the world.

Stefan Gsänger, WWEA Secretary General: "Although the deployment of the wind power worldwide is again speeding up, we still see relatively moderate growth rates, compared with previous years. On the one hand, it is very encouraging that new countries are coming up. On the other hand, we need more support on the national as well as on the international level. We hope that especially the UN climate change conference in Durban will lead to better frameworks for wind energy mainly in developing countries. Amongst the industrialised countries, we expect that Japan will play an active and positive role in wind power in the foreseeable future and join soon the group of leading wind countries."

		Total Capacity	Added Capacity	Total Capacity	Added Capacity	Total Capacity
Position	Country	by June 2011	first half 2011	end 2010	first half 2010	end 2009
	•	, [MW]	[MW]	[MW]	[MW]	[MW]
1	China	52.800	8.000	44.733	7.800	25.810
2	USA	42.432	2.252	40.180	1.200	35.159
3	Germany	27.981	766	27.215	660	25.777
4	Spain	21.150	480	20.676	400	19.149
5	India	14.550	1.480	13.065	1.200	11.807
6	Italy	6.200	460	5.797	450	4.850
7	France	6.060	400	5.660	500	4.574
8	United Kingdom	5.707	504	5.203	500	4.092
9	Canada	4.611	603	4.008	310	3.319
10	Portugal	3.960	260	3.702	230	3.357
	Rest of the World	29.500	3.200	26.441	2.750	21.872
	Total	215.000	18.405	196.682	16.000	159.766

© WWEA 2011



## More information about a specific country?

The 4th edition of the international standard yearbook, Wind Energy International 2011/2012 includes 76 country reports describing the wind energy situation in almost 100 countries on all continents as well as 32 special reports.

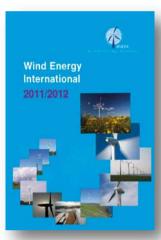
Wind Energy International 2011/2012 is a culmination of reports from experts around the world. It includes updated and complete information on the worldwide status of wind energy. In addition, it also incorporates special reports detailing policies, industrial trends, financing, grid integration, offshore, small scale wind systems, community power, education, training & capacity building.

With the accelerating switch of the worldwide energy system towards more renewable energy, in particular wind power, Wind Energy International 2011/2012 will be even more critical for policy-makers, business people, and parties involved in the energy sector. Best practices from around the

world have been carefully analysed and presented in the yearbook. These include successful feed-in tariff, community power, financing developments that support the widespread diffusion of wind energy. Paul Gipe, author, advocate, and renewable energy industry analyst, book review:

"If you want to know the status of wind energy development worldwide and you only can afford one book, this is the one"

To order Wind Energy International 2011/2012, please order online on the WWEA bookshop.



#### **About WWEA**

The World Wind Energy Association (WWEA) is a non-profit organisation which works for a world energy system fully based on the various renewable energy technologies, with wind energy as one cornerstone. WWEA acts as a communication platform for all wind energy actors worldwide, WWEA advises national governments and international organisations on favourable policies for wind energy implementation and WWEA enhances international technology transfer, a key in the accelerated dissemination of this clean technology.

Currently, WWEA has 500 members and represents the wind sector from 100 countries on all continents. Amongst the WWEA members, there are the national wind energy associations of the major wind countries – which themselves represent more than 50'000 members – as well as companies, scientific institutions and public bodies.

In 2007, WWEA was granted Special Consultative Status at the United Nations. WWEA has observer status e.g. at the UNFCCC Climate Conferences and cooperates with further international organisations. WWEA is represented at the International Steering Committee of

REN21 and is one of the first and major proponents of the creation of the International Renewable Energy Agency IRENA.

WWEA organises annually World Wind Energy Conferences like the WWEC2011 in Cairo/Egypt in October/November 2011 and in the previous years in:

- Istanbul/Turkey (2010)
- Jeju/South Korea (2009),
- Kingston/Canada (2008),
- Mar del Plata/Argentina (2007),
- New Delhi/India (2006).
- Melbourne/Australia (2005),
- Beijing/China (2004),
- Cape Town/South Africa (2003),
- Berlin/Germany (2002).

WWEA is governed by a Board which comprises WWEA President Dr Anil Kane (India), the Senior Vice President Hon. Peter Rae AO (Australia), ten Vice Presidents from the five continents and the Treasurer. The Secretary General Stefan Gsänger manages the daily administration of the association at the WWEA Head Office in Bonn/Germany.



# **World Wind Energy Association**

**Events** 

Don't miss the most important event of the year...



## **Greening Energy**

Converting Deserts Into Powerhouses Cairo - Egypt, 31th October - 2nd November, 2011

## **Wind Energy**

- Wind turbine technology
- Information on planning wind farms
- Integration & storage of renewable energy systems
- Monitoring, operation & maintenance of wind farms
- Ownership models
- National policies on renewable energy sources
- International programs
- Training and education

#### **New in WWEC 2011**

- Regulatory framework in the MEDA region
- Grants & funding for RE
- EU Mediterranean solar plan
- Water desalination
- Capacity building & Training
- Community Power
- Energy Storage
- Energy Efficiency

The conference will hold a competition among university students

#### www.wwec2011.net **Conference secretariat:**

GACIC, Tel.: 0020 2 33368 183, Fax: 0020 2 33368 786, magicx@ahk-mena.com







#### **Uniting the World of Wind Energy Since 2001**

© WORLD WIND ENERGY ASSOCIATION Date of Publication: August 2011

Head Office: Charles-de-Gaulle-Str. 5 53113 Bonn Germany

tel: +49-228-369 40 80 fax: +49-228-369 40 84

E-mail: secretariat@wwindea.org

Web: www.wwindea.org