

## 2005 Wind Power Barometer

The expected German market decline did not result in a decrease in the European Union market, which maintained growth thanks to new installation records set in Spain, Italy, United Kingdom, Portugal and Ireland. EurObserv'ER presents this sector's development in its Barometer published in issue 165 of *Systèmes Solaires* magazine.

### Windpower capacity in 2004 installed worldwide (in MW)

Geographic areas	2003	2004	Installed capacity in 2004	Growth
European Union (25)	28 568	34 366	5 856	20,3 %
Rest of Europe	196	253	57	29,1 %
<b>Total Europe</b>	<b>28 764</b>	<b>34 619</b>	<b>5 913</b>	<b>20,4 %</b>
United States	6 352	6 800	448	7,1 %
Canada	326	441	115	35,3 %
<b>Total Northern Am.</b>	<b>6 678</b>	<b>7 241</b>	<b>563</b>	<b>8,4 %</b>
India	2 120	2 800	680	32,1 %
China	644	740	96	14,9 %
Japan	566	700	134	23,7 %
Rest of Asia	19	27	8	42,1 %
<b>Total Asia</b>	<b>3 349</b>	<b>4 267</b>	<b>918</b>	<b>27,4 %</b>
Rest of the world	572	880	308	53,8 %
<b>Total world</b>	<b>39 363</b>	<b>47 007</b>	<b>7 702 *</b>	<b>19,4 %</b>

*EurObserv'ER 2005 (European Union figures) / Wind Power Monthly 2005 (others)*

*\*Including 58 MW of repowering in the European Union.*

## ***47 007 MW worldwide with 34 366 MW in the European Union***

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The 25-member European Union installed an additional 5 856 MW during 2004, bringing its total installed capacity up to 34 366 MW (+ 20.3% with respect to 2003)\*. The slight world market decrease (7 702 MW installed in 2004 vs. 7 951 MW in 2003) can be explained essentially by the drop in the American market due to the late renewal of the US incentive system (Production Tax Credit). Total accumulated worldwide wind power capacity is now established at 47 007 MW.

The German market has declined for the second year in a row (+ 2 036.9 MW in 2004 vs. + 2 645 MW in 2003 and + 3 240 MW in 2002). This fall can be partially explained by new financial and administrative constraints.

Spain's wind power market evolved thanks to new conditions providing greater clarity for investors. The results of this new legislation led to installation of an additional capacity of 2 064.6 MW, making Spain the world's leading wind power market. In this way, Spain dethroned Germany, which had been in first place since 1993.

## ***Trend to consolidation and globalisation***

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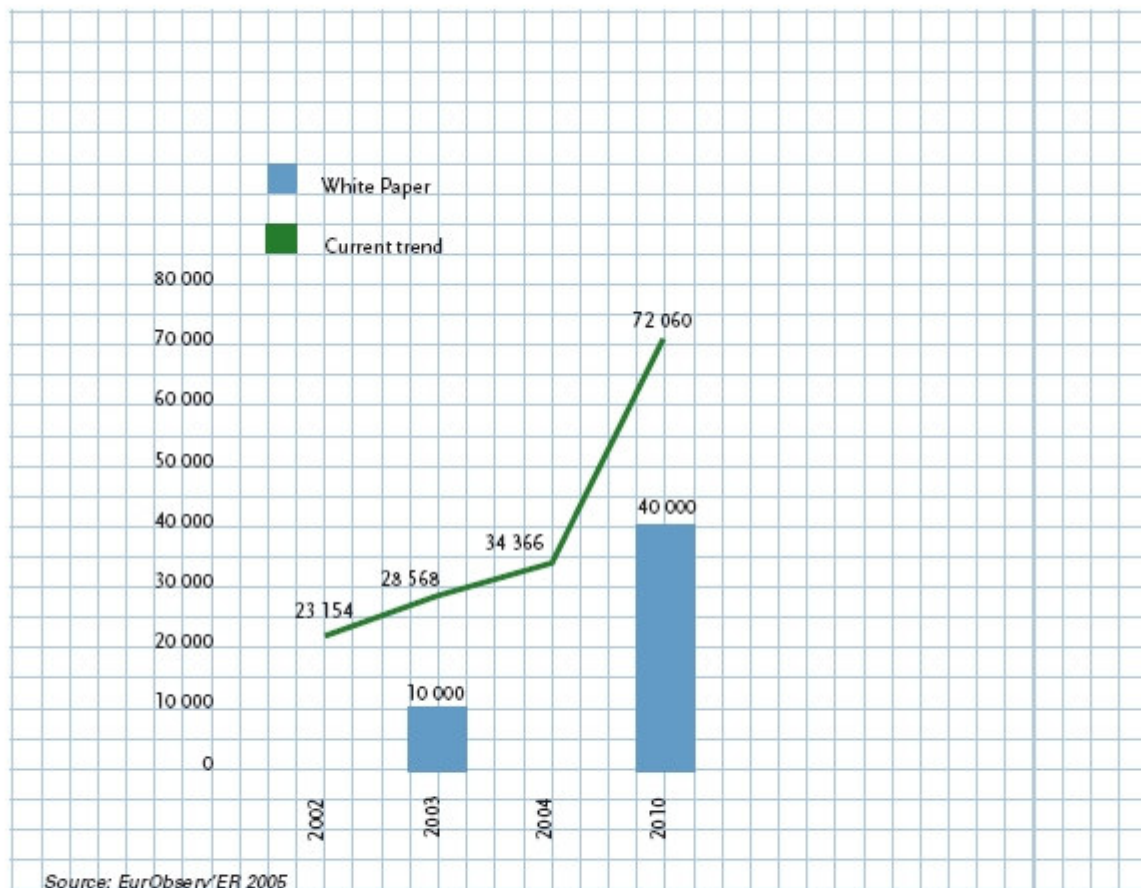
According to the Danish Wind Industry Association, the industrial trend is currently to consolidation and globalisation. This has been demonstrated, on the one hand, by the arrival of a new giant on the wind power market (Siemens, after its purchase of Bonus at the end of 2004). And, on the other hand, by the search for critical size that's led to mergers (Vestas and Neg-Micon in 2004) and buyouts (Made by Gamesa in 2003). The trend towards globalisation can be seen in the growing number of producers and suppliers now found in countries with lower labour costs and dollar-based economies, and by the fact that engineering and research & development are becoming concentrated in industrialised countries like Denmark. In this way, GE Wind, Gamesa and Suzlon all created offices in Denmark in 2004.

The economic stakes represented by the wind power industry have become considerable over the past few years. If one million euros per megawatt installed is taken as an average, then the European market represented close to 5.9 billion euros in 2004.

## Increasing objectives for 2010

The majority of the countries of the European Union have shown high growth rates in their national installed wind power capacities. The progressive lifting of administrative barriers and a better understanding of national particularities on the part of developers have been favourable elements in wind power market extension. The long-awaited take off of certain European markets has led us to revise our forecasts upwards for 2010, with an installed European Union capacity reaching 72 060 MW (vs. the 40 000 MW as targeted by the European Commission). This forecast takes into consideration both the announced decrease in the German market and the increase in importance of the offshore market beginning in 2006.

### Comparison of the current trend with the White Paper objectives (in MW)



\*Details of the installed capacities of the 25 countries of the European Union are available in the Barometer that can be downloaded from the site: [www.energies-renouvelables.org](http://www.energies-renouvelables.org)

# EurObserv'ER

**EurObserv'ER** is a consortium composed of six European organisations devoted to the promotion of renewable energies within the European Union.

These six organisations are:

- **Observ'ER**, the Observatory of renewable energies (Paris, France);
- **Eurec Agency**, the European association of renewable energy research centers (Brussels, Belgium);
- **Eurofores**, European forum for renewable energy sources (Brussels, Belgium);
- **Erec**, The European Renewable Energy Council (Brussels, Belgium);
- **Jozef Stefan Institute**, Energy policy and renewable energy research center (Ljubljana, Slovenia);
- **Systèmes Solaires**, the French Magazine about renewable energies (Paris, France).

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## ***The EurObserv'ER barometer***

The **EurObserv'ER barometer** consists of regular publication in the European press of indicators reflecting the current dynamics of renewable energy sectors (solar, wind, hydraulic, geothermal and biomass) worldwide and within the European Union.

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