



Press release  
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## Photovoltaic barometer 2006

The European photovoltaic market proved its strength and soundness in 2005. 645 MWp of solar cells were installed in EU countries vs. 546 MWp in 2004 (+18.2%), bringing total European installed capacity up to 1,793.5 MWp. EurObserv'ER presents the sector's current state of development in its Barometer published in issue 172 of *Systèmes Solaires*.

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### *European market of 645 MWp installed capacity in 2005*

The European Union photovoltaic market reached its limits in terms of supply capacities for the first time in 2005. Photovoltaic industrialists could have produced a lot more modules if it had not been for the current shortage of silicon, the main raw material needed for manufacturing solar cells. The first figures available indicate that a minimum of 645.3 MWp was installed in the EU countries, i.e. a "minimum" growth of 18.2% with respect to the 2004 market. Total overall installed capacity now represents approximately 1,793.5 MWp, corresponding to the needs in electricity of 600,000 households (using a hypothesis of an average annual household consumption of 3,000 kWh per year, excluding electric heating).

**Table 1: Photovoltaic power installed in European Union during the year 2004 and the year 2005 (in MWP)**

| Countries         | market 2004    |              |                | market 2005*   |              |                |
|-------------------|----------------|--------------|----------------|----------------|--------------|----------------|
|                   | on grid        | off grid     | Total          | on grid        | off grid     | Total          |
| Germany           | 500.000        | 3.000        | 503.000        | 600.000        | 3.000        | 603.000        |
| Spain             | 9.241          | 1.348        | 10.589         | 18.700         | 1.500        | 20.200         |
| France            | 4.180          | 1.050        | 5.230          | 5.800          | 0.567        | 6.367          |
| Italy             | 4.200          | 0.800        | 5.000          | 4.500          | 0.500        | 5.000          |
| United Kingdom    | 2.197          | 0.064        | 2.261          | 2.400          | 0.100        | 2.500          |
| Austria           | 1.833          | 0.514        | 2.347          | 1.730          | 0.520        | 2.250          |
| Netherlands       | 5.540          | 0.120        | 5.660          | 2.000          | 0.100        | 2.100          |
| Greece            | 0.150          | 1.151        | 1.300          | 0.156          | 0,745        | 0.900          |
| Portugal          | 0.103          | 0.528        | 0.631          | 0.100          | 0.500        | 0.600          |
| Belgium           | 0.336          | 0.000        | 0.336          | 0.502          | 0.000        | 0.502          |
| Denmark           | 0.360          | 0.085        | 0.445          | 0.300          | 0.050        | 0.350          |
| Sweden            | 0.000          | 0.285        | 0.285          | 0.060          | 0.250        | 0.310          |
| Finland           | 0.030          | 0.270        | 0.300          | 0.030          | 0.270        | 0.300          |
| Cyprus            | 0.105          | 0.050        | 0.155          | 0.235          | 0.045        | 0.280          |
| Ireland           | 0.000          | 0.020        | 0.020          | 0.000          | 0.200        | 0.200          |
| Slovenia          | 0.005          | 0.028        | 0.033          | 0.112          | 0.004        | 0.116          |
| Czech Rep.        | 0.069          | 0.017        | 0.086          | 0.111          | 0.003        | 0.114          |
| Poland            | 0.022          | 0.105        | 0.127          | 0.016          | 0.067        | 0.083          |
| Luxemburg         | 8.030          | 0.000        | 8.030          | 0.066          | 0.000        | 0.066          |
| Hungary           | 0.030          | 0.008        | 0.038          | 0.030          | 0.008        | 0.038          |
| Malta             | 0.000          | 0.000        | 0.000          | 0.009          | 0.000        | 0.009          |
| Estonia           | 0.000          | 0.000        | 0.000          | 0.000          | 0.001        | 0.001          |
| Latvia            | 0.000          | 0.000        | 0.000          | 0.000          | 0.001        | 0.001          |
| Slovakia          | 0.000          | 0.000        | 0.000          | 0.000          | 0.000        | 0.000          |
| Lithuania         | 0.000          | 0.000        | 0.000          | 0.000          | 0.000        | 0.000          |
| <b>Total U.E.</b> | <b>536.431</b> | <b>9.443</b> | <b>545.873</b> | <b>636.857</b> | <b>8.430</b> | <b>645.287</b> |

\* preliminary figures.

Source: EurObserv'ER 2006.

Figures for installed capacities are accessible in the integral version of the Barometer that can be downloaded free of charge from: [www.energies-renouvelables.org](http://www.energies-renouvelables.org)

## Germany alone installs 603 MWp

Germany continued to be the leading EU photovoltaic market in 2005 and installed more than 600 MWp. This unabashed success inspired Spain and Italy to put into effect the conditions needed to rapidly develop their own photovoltaic sectors. Provisional figures for markets in Spain (20.2 MWp in 2005) and Italy (5 MWp in 2005) are going to take on a whole new dimension beginning this year once supply and installation structures are capable of meeting the enormous demand that already exists (see the complete version of the Barometer). The French market (6.4 MWp financed in 2005) essentially comes from France's overseas departments (4.3 MWp). The new incentive system set up in 2005 in metropolitan France (40% tax credit cumulated with a low purchase price) was judged as being insufficient by private individual investors.

## A worldwide industry running full throttle

Figures announced for all industrialists worldwide are much higher than expected. The annual survey made by the american review, *PV News*, reports that 1,727 MWp of photovoltaic cells were produced in 2005, i.e. 44.5% growth with respect to 2004 (1,195 MWp produced). The 2005 ranking of the main industrial producers of photovoltaic cells is representative of the principal cell production zones in the world (Japan, Europe, USA and China).

**Table 2: Top 12 worldwide manufacturers of PV cells (in MWp)**

| <b>Companies</b>  | <b>2004</b>    | <b>2005</b>    | <b>Growth in %</b> | <b>Market share 2005</b> |
|-------------------|----------------|----------------|--------------------|--------------------------|
| Sharp             | 324.0          | 428.0          | 32.1%              | 24.8%                    |
| Q-Cells           | 75.0           | 160.0          | 113.3%             | 9.3%                     |
| Kyocera           | 105.0          | 142.0          | 35.2%              | 8.2%                     |
| Sanyo             | 65.0           | 125.0          | 92.3%              | 7.2%                     |
| Mitsubishi        | 75.0           | 100.0          | 33.3%              | 5.8%                     |
| Schott Solar      | 63.0           | 95.0           | 50.8%              | 5.5%                     |
| BP Solar          | 85.0           | 90.0           | 5.9%               | 5.2%                     |
| Suntech           | 28.0           | 80.0           | 185.7%             | 4.6%                     |
| Motech            | 35.0           | 60.0           | 71.4%              | 3.5%                     |
| Shell Solar       | 72.0           | 59.0           | -18.1%             | 3.4%                     |
| Isofotón          | 53.0           | 53.0           | 0.0%               | 3.1%                     |
| Deutsche Cell     | 28.0           | 38.0           | 35.7%              | 2.2%                     |
| Other industrials | 187.0          | 297.0          | 58.8%              | 17.2%                    |
| <b>Total</b>      | <b>1,195.0</b> | <b>1,727.0</b> | <b>44.5%</b>       | <b>100.0%</b>            |

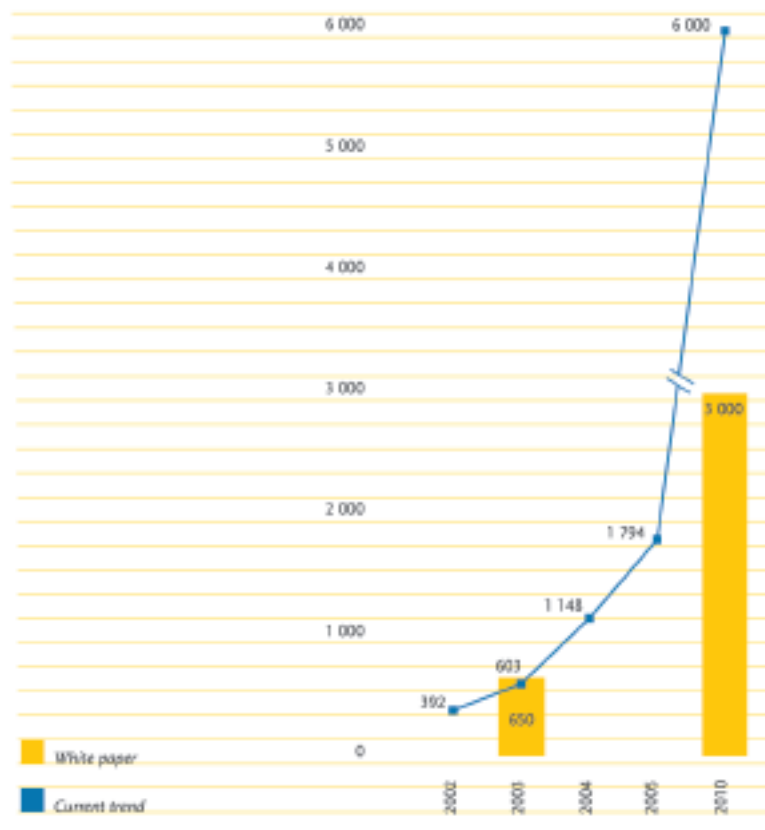
Source : PV News, March 2006.

## 2010 prospects depend on policies

The importance of the German market, which was greatly underestimated in 2004, as well as the securing of the Italian and Spanish markets have led us to re-evaluate once again our forecast for the year 2010, now foreseen at 6,000 MWp. This estimate is based on the German market maintaining a level of 600 MWp per year and on the achievement of Italian and Spanish objectives. The European Photovoltaic Industry Association even estimates that if policies continue to support the photovoltaic sector, the European Union could reach 7,000 MWp at this same date.

Photovoltaic market evolution is therefore going to continue to be dependent on political decisions in the years to come. But to justify this support, the sector industrialists are going to have to show that they are capable of reducing production costs. The goal is to approach as closely as possible the cost of a fossil fuel origin kilowatt-hour... a price that's continually rising today.

**Graph 1: Comparison of the current trend with the White paper objectives (in MWp)**



# 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);
- Eufores, European forum for renewable energy sources (Brussels, Belgium);
- Erec, The European Renewable Energy Council (Brussels, Belgium);
- Jozef Stefan Institute, Energy Efficiency Center (Ljubljana, Slovenia);
- Systèmes Solaires, french renewable energies issue (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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EurObserv'ER barometers may be downloaded in PDF format at the following addresses:

[www.energies-renouvelables.org](http://www.energies-renouvelables.org) – [www.eurec.be](http://www.eurec.be) – [www.eufores.org](http://www.eufores.org) –

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