

11 December, 2008

New European Commission Report shows 60% increase in solar panel production in 2007

The European Commission's Joint Research Centre has today released the latest *Photovoltaics Status Report*. This scientific study combines analysis of up-to-date international manufacturing and market implementation data throughout 2007 with subsequent strategic and political developments up to September 2008.

Preliminary findings show:

- an increase in the yearly growth rate of solar photovoltaic production, averaging 40% over five years and then peaking at 60% in 2007;
- a €5.7 billion turnover in Germany in 2007 with in excess of 100,000 houses installing solar panels;
- world electricity production with PV systems is ca 10 Billion KWh, of which half comes from the EU. Solar energy still accounts for only 0.2% of total electricity consumption in Europe. Yet, the net effect is 4 million fewer tonnes of CO₂ being released;
- incentive schemes and technical advances are having a positive downward impact on photovoltaic costs. Market value is estimated to reach €40 billion by 2010 with lower prices for consumers.

How does solar power work?

Photovoltaic solar energy is one of 14 different energy technologies that the Joint Research Centre is currently assessing within the context of the **Strategic Energy Technology Plan**, which is a key input to Europe's current energy policy. Solar energy works by generating electricity using semiconductor devices known as solar cells. A number of solar cells form a solar "Module" or "Panel", which can then be combined to solar systems, ranging from a few Watts of electricity output to multi Megawatt power stations. Recent advances such as thin film technologies are becoming increasingly commercial. This process allows an entire module to be processed in a single step.

A bright future for solar

The photovoltaic growth scenario for Europe based on 2001 to 2007 data, an analysis of European policies and assessment of current investments predicts that more than 15TWh of electricity will be generated in 2010. This equates to 0.5% of the

EU 27 total net production of electricity in 2006 or the same as Slovenia's total electricity consumption.

Projections are that by 2012 China will account for 27% of worldwide solar cell production capacity (approximately 42.8 GW), followed by Europe with 23%, Japan with 17% and Taiwan with 14%.

Further information

The Joint Research Centre, through the **SETIS** (Strategic Energy Technology Information System) provides independent, validated and reliable information on energy technologies to European decision-makers and stakeholders. This ranges from research on hydrogen fuel-cells and solar to nuclear energy.

The Joint Research Centre comprises 2,750 staff across seven research institutes in five EU Member States (Belgium, Germany, Italy, The Netherlands, Spain), including the **Institute for Energy** in Petten, North Holland.

The last edition of the Photovoltaic Status Report 2007 was downloaded 150,000 times demonstrating the clear interest in this research area.

To find out more

- Get a free copy of the new *Photovoltaic Status Report 2008* at: <http://re.jrc.ec.europa.eu/refsys>:
- Joint Research Centre: www.jrc.ec.europa.eu
- Aidan Gilligan, JRC Press Officer, aidan.gilligan@ec.europa.eu; +32 (0)2 2986482.

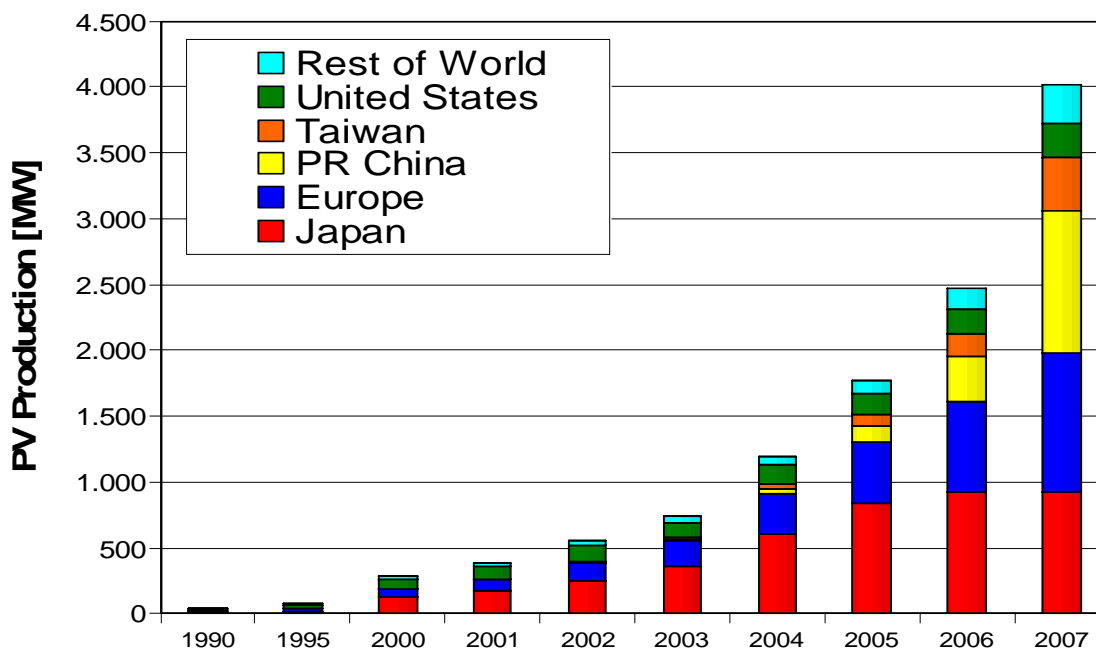


Figure 1: World-wide PV Production from 1990 to 2007
 Data Source: PV News, Photon International and JRC analysis

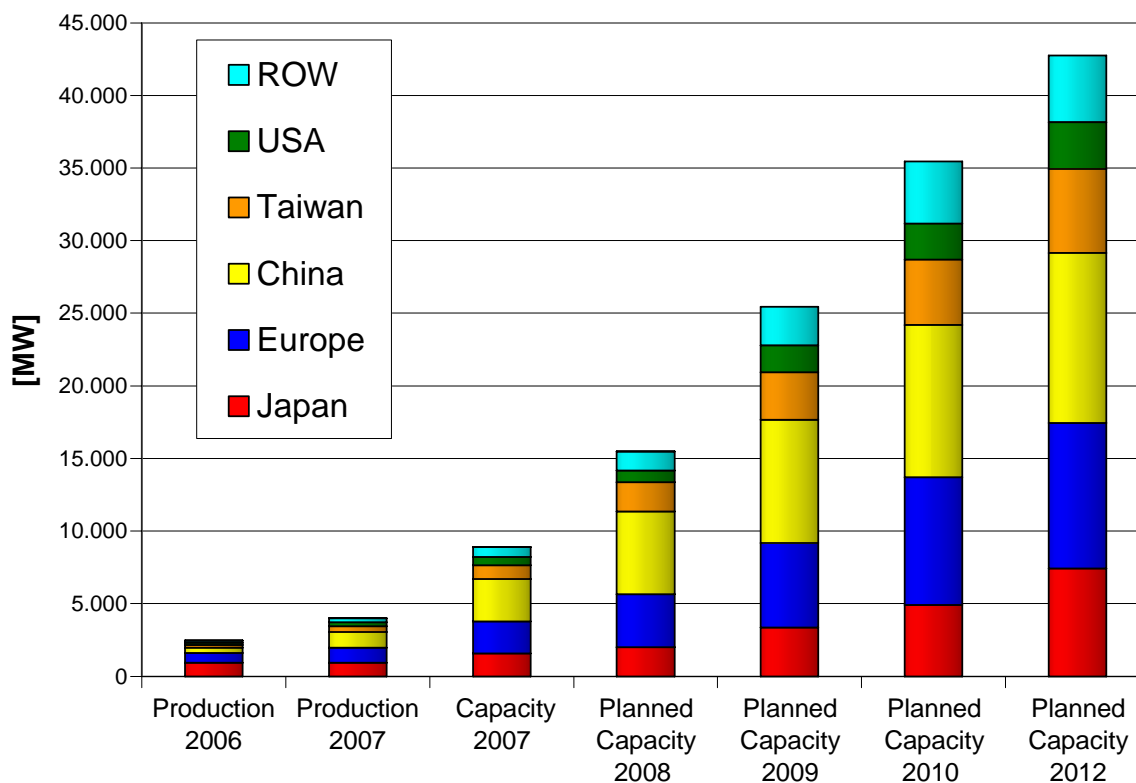


Figure 2: World-wide PV Production 2006 and 2007 with future planned production capacity increases

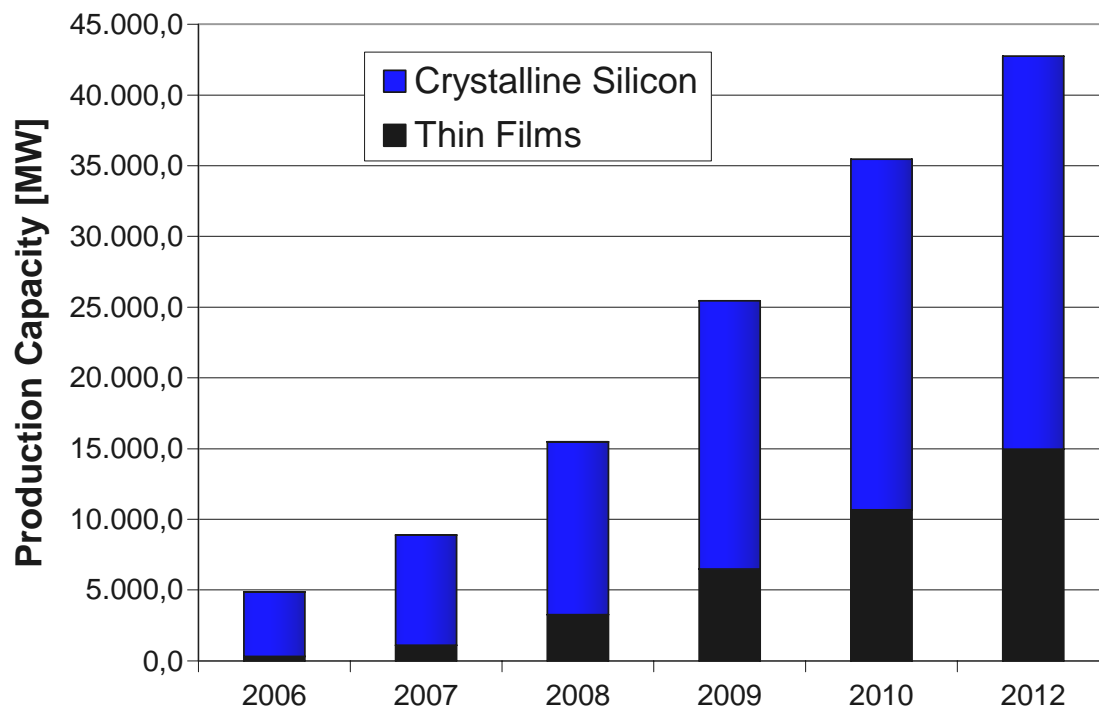


Figure 3: Actual and planned (2008 and onwards) PV Production capacities of Thin Film and Crystalline Silicon devices.