



Photovoltaics

“The sky’s the limit!”

AMR has conducted numerous projects in the renewable energies sector and has cooperated closely with experts in this field, including the Fraunhofer Institute for Solar Energy Systems

Key findings:

- Global demand for photovoltaic modules is expected to grow by 42% per annum until 2012
- Germany is the most important photovoltaic market and production capacity is set to grow by CAGR 40% until 2012
- Grid parity has already been reached in some areas; it is expected for the whole of Europe by 2015

How is the photovoltaic market developing?

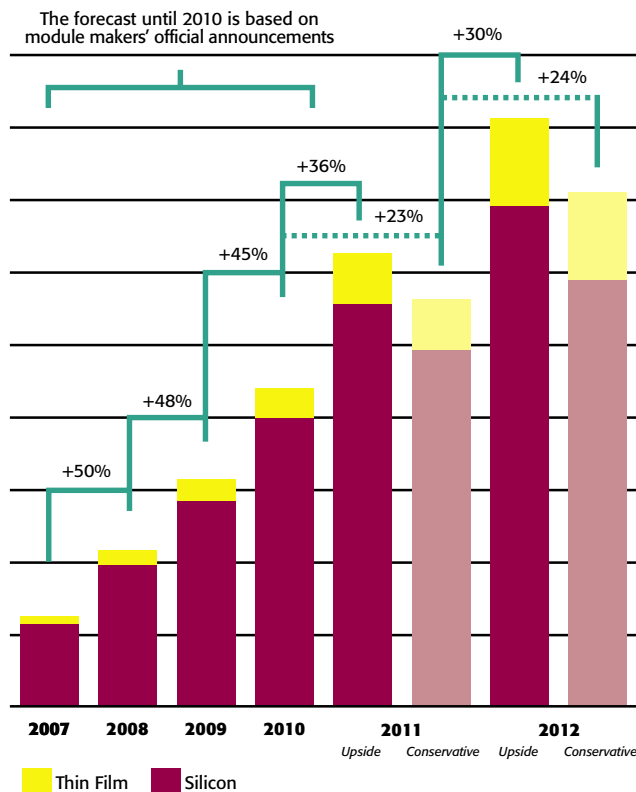
Photovoltaics (PV) is a technology used to generate solar power by using solar cells packaged in photovoltaic modules to convert energy from the sun into electricity. In contrast to concentrated solar power, photovoltaic modules can be installed in regions with lower sun radiation.

Recent shortages of silicon have led to an investment in thin film technologies for module production, thus increasing their market share. AMR expects this increase to continue, but the traditional thick film modules will remain dominant as the silicon shortage is expected to be resolved soon and the thick film modules can offer a higher average efficiency.

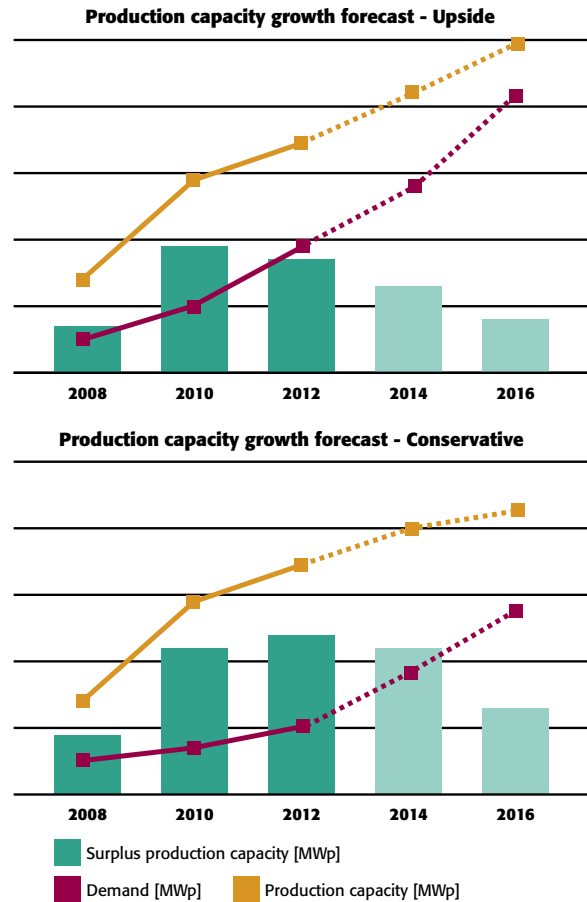
Demand for PV-modules has experienced strong growth in recent years and this is forecast to continue until 2010. For 2010 onwards, AMR has developed a comprehensive market model comprising two scenarios to forecast production capacity growth (see below). Increases in production capacity are driven by module manufacturers aiming to reach a critical mass before price pressure begins to set in. However, production is set to outstrip demand. The question is by how much? Forecasts for demand differ wildly; without exception though, all published scenarios agree that overcapacities are being built up. AMR has produced an upside and a conservative scenario to assess the overall impact of this until 2016 (See right).

The photovoltaic module market is characterised by established players, e.g. Sharp and SolarWorld, with smaller, new market entrants having only a small share. AMR expects a period of consolidation in the longer-term, which will see these new players exiting the market due to their smaller production capacities and lack of expertise.

Photovoltaic module production capacities forecast



Photovoltaic module supply vs. demand



About AMR International

AMR International has 17 years of experience dedicated to supporting investors and companies make the best acquisition and investment decisions. AMR International is the world's leading management consulting firm specialising in commercial due diligence. With offices in London, Frankfurt and New York, we have conducted nearly 1,000 commercial due diligence assignments worldwide. The majority of our work is with mid-market companies although we have completed assignments on transactions valued over £1 billion. Key sectors in which we have extensive experience are consumer goods and services, industrial products, media and publishing and support services.



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