

Photovoltaics is on the Rise

With a worldwide growth of 33 percent last year and currently some 6.5 billion potential customers, the figures of the photovoltaic industry are reminiscent of the New Economy at the end of the 1990s. The industry has set ambitious goals to drive the development of solar systems for "cleaner" energy.

► Despite this impressive growth in recent years, energy from solar power currently covers far less than one percent of the total demand in the European Union. Better protection against climatic changes and the phasing out of atomic energy can only be achieved if renewable energy programs are radically expanded. However, structural change will only succeed in the foreseeable future if government and industry are willing to support the expensive development of photovoltaic applications. In August 2003 members of the European Parliament discussed this subject in Brussels with top representatives from research and industry. In their "White Book" on the development of photovoltaics, the EU politicians have set a target to produce a total of 3,000 megawatts of solar energy in 2010. By the end of 2002, the figure was 391 megawatts.

Support through market incentive programs

"Photovoltaics has by far the highest technological potential of all regenerative energies, but it will take several decades before

the share of solar power will become a dominating factor in energy supply," says Professor Joachim Luther of the Fraunhofer Institute for Solar Energy Systems (ISE). Solar power is currently being supported by subsidy programs such as the 100,000 Roofs Program of the German Federal government or the 70,000 Roofs Program in Japan so that industry can invest more in the development of solar energy. According to Professor Luther, the two most important factors for the successful future of generating power from sunlight are reducing costs in the production of solar modules and increasing the efficiency in solar energy yields.

Handling "peaks" with solar power

These aspects are also a primary concern of Dr. Winfried Hoffmann of RWE Schott Solar. By introducing new production technologies and innovative applications for the market, such as transparent solar panels for facade glazing, RWE Schott Solar has grown



From left: EU parliamentarian Rolf Linkohr, Dr. Winfried Hoffmann (RWE SCHOTT Solar GmbH) and Professor Joachim Luther (Fraunhofer Institute for Solar Energy Systems) shared thoughts at an information event in Brussels.

into Europe's biggest photovoltaic supplier within a relatively short time. Speaking to parliamentarians in Brussels, Hoffmann emphasized the inherent advantages of photovoltaics. For example, the energy requirements of an office building throughout the day are highest between 8 a.m. and 6 p.m. This is exactly the time when solar systems work most efficiently. Peak times in energy consumption could thus be handled by solar power, without having to temporarily store the energy.

The fact that photovoltaics is considered a promising alternative for the future is further substantiated by the commitment of such major oil producers as BP and Shell in this field, who now rank second and fourth among the top photovoltaic producers in the world. ◀

www.schott.com/photovoltaic