

A Strong Team

Dr. Winfried Hoffmann, Chairman of the Managing Board of RWE Schott Solar GmbH, and Michael Harre, responsible for Marketing and Sales on the Board, discuss the strengths of the new joint venture and the perspectives for photovoltaics.

What were the reasons behind the decision to build the new factory in Germany?

Hoffmann: There is a clearly growing market for photovoltaics here. Both the "100,000 roofs program" and the Electricity Feed-In Law in Germany contributed to this decision. It is our philosophy to have production facilities where the markets are. Another reason for choosing Germany was the existing technological competence in producing and developing solar power components.

Besides Germany, where else is the market for solar energy growing so fast?

Harre: Another example is Japan. After the Kyoto Conference, the Japanese government recognized the importance of photovoltaics in its efforts to achieve climate protection goals as early as the mid-1990s. The photovoltaic market developed rapidly, and today, Japan is the largest sales area with far more than 100 megawatts per year. A number of subsidization programs for renewable energy in general and for solar energy in particular were also introduced in the United States. In Germany the photovoltaic market has been booming since 1999, resulting in 40 percent growth per year from 1999 to 2001 and a market that amounted to 80 megawatts in 2001.

How is the installation of the facilities progressing in Alzenau?

Hoffmann: The increase in capacities is moving along according to plan, and we are expanding all our production sites. The first cell production line for our biggest project, the new "SmartSolarFab" in Alzenau, is installed and has already begun continuous operations. Facilities for our unique wafer growth process, the so-called EFG process, are also finished, and the first module production line will follow this year.

What are the advantages of this joint venture?

Harre: High competence in technology, production and automation is required to increase capacities to 100 megawatts. The former RWE Solar has accumulated a lot of know-how in this field in the past 30 years. By merging their interests with Schott's, whose success for more than 100 years has been based on the

development and production of industrial products, mainly glass and coatings, we will be able to realize our ambitious plans for expansion faster and to achieve major advances in productivity.

How does one manage a company on equal terms?

Hoffmann: Joint ventures are not new to either company. We see this joint responsibility as an opportunity to incorporate everyone's ideas into a strong team and to seek solutions with the backing of both partners.

Is your long-term goal to be the number one in photovoltaics worldwide?

Harre: RWE Schott Solar is already technological leader worldwide at all levels of the value-added chain – wafers, solar cells and modules. For commercial success we need economy-of-scale effects comparable to our competitors. We have laid the foundations for this drive with our expansion efforts.

or the only solution. Solar units without mains supplies are especially economical. This is also true in Germany, for example with call boxes or traffic signs on highways, where cabled electricity supply would be very expensive.

The new factory is supposed to help reduce costs. What possibilities do you see here?

Hoffmann: Our expansion plans offer an enormous potential for an increase in productivity and a reduction in costs. Continuous process optimization is the key factor for these improvements.

Some experts criticize that market support programs prevent further technological development. Is this true?

Harre: On the contrary! When you have the right framework, a highly competitive market is created in which only the best products have a chance to survive.



Who are your most important competitors and how active are they in Germany?

Hoffmann: Photovoltaics is already a global market. Our competitors are Japanese companies like Sharp or Kyocera, who have the advantage of a strong domestic market. But we are also closely monitoring the activities of the oil producers Shell und BP. On the whole, we expect a further consolidation of the market. RWE Schott Solar will invest more than 200 million euros in new production facilities in the next three years to preserve our competitive cost structure.

What is your response to the claim that photovoltaics is too expensive?

Harre: That claim is too general. Of the areas sold in 2000, about 2.50 million square meters, some 50 percent were used in regions where solar power was the most cost effective

With ambitious expansion plans, top executives Dr. Winfried Hoffmann (right) and Michael Harre (left) are achieving major improvements in productivity in the production of solar cells.

Silicon wafer technology now dominates the market. How would you judge the future of thin-layer technology, an alternative that you also have at your disposal?

Hoffmann: Thin-layer technology will not replace crystalline silicon technology, but it will open up new applications. Examples of our ASI thin-layer technology are power supply in consumer areas or the large-scale integration of, for instance, semitransparent modules in facade construction.

The interview was conducted by Klaus Jopp