SOLARPARK SCHMELCHEN
Altomünster, Germany

Project data

System name:	Solarpark Schmelchen
Operator:	Alto Solar GmbH & Co KG
Energy company:	E.ON Bayern AG
Location:	Altomünster (Germany)
Commissioned:	December 2006
Completion time:	10 weeks

Technical data

Rated system power	1.685 MWp
Annual energy yield	approx. 1,800 MWh
Equivalent to the power consumption of	approx. 450 families**
Feed-in tariff/kWh	EUR 0.406
Feed-in tariff p.a.	approx. EUR 730,800
CO_2-savings p.a.	approx. 1,035 t*

No./type of modules	25,920 x First Solar FS-265
Inverter	1 x SMA SC 1000 MV (derated to 900 kW), 1 x SMA SC 700 MV
Construction type	ground-mounted system, rammed substructure
Tilt angle	30°
Frame technology	Phoenix Solar ground-mounted 4-row FS frame
Orientation	south

* Source: The evolution of carbon dioxide emissions within the German power mixture 1990-2008: 0.575 tons CO_2 saved per MWh (Umweltbundesamt FG I 2.5., Status March 2010)

** Source: Average power consumption of a family: 4,000 kWh (Verivox, Status 2010)

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Hans Schweiger, an early solar pioneer, operates the solar power plant in Altomünster together with his partner Gerhard Huber.

"With our solar power plant we send a clear signal that entrepreneurship and active environmental protection are not conflicting goals. Phoenix Solar has supported us reliably and competently during the realisation of the project and makes sure that our power plant is professionally performance monitored."

Flexibility as basis for the right system strategy

When the solar power plant belonging to the company Alto Solar Schmelchen was connected to the grid just before New Year's Eve 2006, this was more than just the successful completion of a project. After all, commissioning of the plant was actually planned for 2007. To support the projects finalisation in 2006, a co-operation with Gehrlicher Umweltschonende Energiesysteme GmbH ensured that the project could be executed with First Solar modules.

In a very short time, the operating company, Alto Solar Schmelchen, adapted the financing concept to the earlier date.

At the same time, Phoenix Solar already revised all construction and project plans, and integrated all subcontractors into the new schedule. The plant with a total of 25,920 modules and a total capacity of 1.685 MWp was built in just 10 weeks, and connected to E.ON's grid.

One anomaly arose when it came to making the electrical connection, as E.ON only allowed feed-in power of 1.6 MW on the AC side. In cooperation with the company SMA, the Phoenix Solar team arranged for the output of one inverter to be reduced from 1000 kW to 900 kW in order to comply with the specifications.

As a large amount of snow falls in the Dachau area, the substructure was mounted about 10 cm higher by means of longer posts, as requested by the operating company.