

SOLAR PARK EVOBUS Neu-Ulm, Germany



Project data

| | |
|------------------|---|
| System name: | Solarpark EvoBus |
| Operator: | SWU Energie GmbH |
| Energy company: | SWU Stadtwerke Ulm/Neu-Ulm GmbH |
| Location: | Neu-Ulm |
| Commissioned: | 2008/12/23 (Part 1) and 2009/03/05 (Part 2) |
| Completion time: | October 2008 through March 2009 |

Technical data

| | | | |
|--|------------------------|---------------------|--|
| Rated system power | 2.3 MWp | No./type of modules | 7,200 Phoenix Solar PHX-160 6,624 SunTech STP-175 |
| Annual energy yield | approx. 2,195 MWh | Inverter | 4 x SMA SC 500 HE |
| Equivalent to the power consumption of | approx. 549 families** | Construction type | Vertical rails laid directly on trapezoidal sheet metal roof |
| Feed-in tariff/kWh | EUR 0.4399 (2008) | Tilt angle | 13° |
| Feed-in tariff p.a. | approx. EUR 965,862 | Frame technology | Tecto-Sun Plus |
| CO ₂ -savings p.a. | approx. 1,263 tons* | Orientation | South |

* Source: The evolution of carbon dioxide emissions within the German power mixture 1990-2008: 0.575 tons CO₂ saved per MWh (Umweltbundesamt FG I 2.5., Status March 2010)

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

SOLAR PARK EVOBUS Neu-Ulm, Germany



Jürgen Schöffner, Dipl.-Ing.
(Graduate Engineer) Technical Director
of SWU Energie GmbH, Ulm

„Phoenix Solar has delivered impressive proof of its competence and outstanding service in building our roof-integrated power plant. The company not only fulfilled all our requirements but delivered a turnkey power plant which, since being taken into operation, has delivered yield in the dimension promised. Our solar park has thus proven to be an attractive investment – and our civic participation project as a big success.“

On track and on schedule for success

Even though SWU Stadtwerke Ulm/Neu-Ulm GmbH and Phoenix Solar AG have been long-standing partners, the decision to jointly build a power plant on the roof of EvoBus GmbH rested solely on the product quality and the competence of Phoenix Solar. The tender for this Ulm civic participation project did indeed pose some unique challenges.

The first of these challenges was to ensure that the construction of the power plant did not interrupt operations, which was why Phoenix Solar delivered and distributed the necessary materials for the roof from the west side only. On a roof surface area which was 160 meters wide this was some logistics job!

The second challenge was the roof construction itself: The cladding was

made of trapezoidal metal sheeting so the screws had to be removed and suitable connectors fixed. After all, Tecto-Sun, a TÜV-certified on-roof assembly system by Phoenix Solar had to fulfil the highest security standards.

Surmounting the greatest challenge entailed not only clever planning and experience but also special commitment. With a construction period from the end of October 2008 through to the start of March 2009, the timeframe was extremely tight and slap in the middle of winter. Despite snow and ice, however, the power plant was ready on time and taken into operation by the deadline and, since then, generates power from the heavens for the citizens of Ulm.

