

## EWE Oldenburg: The Smart Grid becomes reality

EWE AG, with its head office in Oldenburg, is one of the largest energy suppliers in Germany. EWE NETZ GmbH is a member company of the EWE Group, a 100% subsidiary of EWE AG. EWE NETZ operates an extensive electricity and natural gas network in the Ems-Weser-Elbe region, as well as widespread natural gas networks in Brandenburg, Rügen and North Western Pomerania.

EWE did not start preparing itself for the Smart Grid challenge just yesterday. Alongside a widely ramified communication network for controlling and monitoring the energy networks, the EWE Group's range of services also covers landline telephone networks, Internet access, IT services, radio networks and fixed line data connections using an appropriate proprietary network infrastructure.

an Internet portal and a display, meter data from the electricity and natural gas meter are transferred via an Internet connection to a host computer. It is therefore an important part of the measuring and information infrastructure. EWE is currently testing this innovation in 400 households, in order to optimally adjust the technology to customer requirements and in order to develop a marketable product.

the Oldenburgers the envy of many, as they support a low-cost and efficient installation. Where possible, gas meters are connected to the communication module of the electricity meter via a cable-based M-Bus interface.

As part of the EWE pilot projects, diaphragm gas meters from Elster with Absolute ENCODER technology are being used. The advantages are obvious: no batteries in the metrology-relevant part of the meter, absolute meter readings, simple installation without additional costs involved in parameter setting and an index, whose service life corresponds to that of the meter.

Furthermore, the interface design of the Absolute ENCODER index offers complete flexibility for installation. Different communication modules are at any time interchangeable, e.g. to set up a wireless link at a point where it is not possible to have cable connection to the electricity meter. A further and reassuring factor is that the ENCODER concept is already reliably being used in many projects across Europe.

To make the Smart Grid vision a reality involves costs and investments, but also innovation and progress. The fruits of these investments will in the future allow every consumer to make their contribution to protecting the environment and smooth out the path for intensive use of renewable energy, as is also a political aim in Germany.

Elster GmbH looks forward to being a reliable partner for EWE also for future innovative product solutions.



The project team: Holger Gerdes, Holger Waden and Derk Thiems

For its pioneering work in the field of intelligent electricity and natural gas meters, in November 2009 the energy supplier from Oldenburg was rewarded by the Deutsche Umwelthilfe (German environmental aid association). With the so-called EWE BOX, where customers can observe their power and gas consumption in real time using

In parallel with this, additional pilot projects involving electricity and gas meters are also being carried out, with 3000 electricity and gas smart meters being installed. When selecting the communication technology to be used, the installation situation at the customer's premises plays a large role and must be taken into consideration in the design of the business model. A number of EWE customers have a so-called meter niche, where electricity and gas meters are installed directly next to one another. Such circumstances make

Carsten Lorenz carsten.lorenz@elster.com  
Michael Tiede michael.tiede@elster.com