

## Heat Delivered to Your Doorstep Mobile Heat Storage Developed at the Waste-to-Energy Plant in Hamm (Germany)



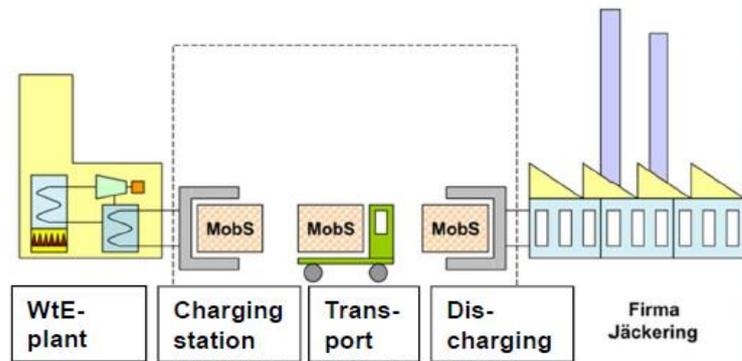
Heat storage tank transported by truck



Waste-to-Energy plant in Hamm

The Waste-to-Energy plant in Hamm (Germany), the company Hoffmeier Industrieanlagen GmbH + Co. KG, an international provider of professional manufacturing services (also based in Hamm) and the ZAE Bayern, being one of the leading institutions in the field of applied energy research in Germany, have carried out, an innovative project that delivers heat directly to your doorstep. A mobile sorption heat store, called “MobS”.

ZAE Bayern and Hoffmeier Industrieanlagen jointly designed and built a prototype mobile heat storage unit to make this heat delivery possible. The use of mobile heat to supply energy for a remote location is an excellent way to improve the energy efficiency of an existing process, and may be a solution where a pipeline connection cannot be realised cost-effectively. In the pilot project, a Waste-to- Energy plant (incineration with energy recovery) provides the source of heat. At the heat demand site, the mobile storage is discharged into an industrial drying process. The demonstration plant has been successfully tested and operated over a period of about two years until summer 2014.



The main goals of the project have been to demonstrate the viability and determine the costs of a mobile heat storage process based on an open-cycle sorption system. Mobile heat using energy from waste may be a competitive substitute for conventional energy if high energy storage capacities, frequent cycles (200 storage cycles per year) and low investment and operating costs for the mobile storage system can be realized. Based on the results of the demonstration plant heat generation costs of about 73 €/MWh can be predicted for an optimized and commercialized version in Germany.

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### General information on the Waste-to-Energy plant in Hamm, Germany

Four incineration lines process approximately 295,000 tonnes (8,800 kJ/kg) of residual waste per year. The plant generates around 130,000,000 kWh electricity and exports around 124,000,000 kWh heat annually.

**For more information:** <http://www.mva-hamm.de> or <http://www.mobile-waermespeicher.de>