

3.2.2 2nd Field trip Summary Report



Tangeln, Altmark, Germany
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4BIOMASS – Fostering the Sustainable Usage of Renewable Energy Sources in Central Europe - Putting Biomass into Action!

Adjacent to the workshop in Kakerbeck on 20 September 2011, 30 stakeholder of the Altmark Region of Germany visited the bioenergy village of Tangeln in Saxony-Anhalt. Stakeholders were hosted by the manager of the enterprise that runs the local biogas plant providing heat to local households.



Picture 1 The biogas plant Tangeln

The manager, Günter Willert from the Landwirtschaftliche Unternehmen Tangeln eG (Agricultural company Tangeln), received the participants of the field trip to guide them through the biogas plant.

Since the end of 2007, the biogas plant in Tangeln has been producing electricity from cattle manure, grass and maize silage in a cogeneration plant. The electricity was fed into the local grid, but heat could be used only partly in the company. The idea to use the heat from the biogas plant in the households of the village came from the citizens themselves.

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A local heating network was built in 2009. 68 % of the 110 households in the village and all public buildings are connected to the heat network. 95 % of asked households joined the local heat network, the others were so far away that a connection pipeline wouldn't be feasible.

Each participating household joint the energy cooperative and paid € 3000 as a cooperative share. The annual heating costs are not charged after the consumed heat, but after the maximum heat transfer performance of the installed heat exchanger. Through this a constant heat consumption is achieved and a buffer storage is not needed.

The biogas plant produces 8.5 Mio kWh electricity and 9.0 Mio kWh heat annually. In the winter the heat is used for residential heating and in the summer in a drying process for maize and grain. Thus a high share of heat utilization can be reached, over 90 %. Last year 6.8 Mio kWh heat were fed into the local heat network.

The participants of the field trip were very interested on the concept of the local heating network and the tour to the biogas plant ended in a lively discussion.



Picture 2 Mr. Willert presented the biogas plant

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Picture 3 The cogeneration plant in Tangeln