



District Heating in Tranebjerg and Nordby/Mårup

The Regional Electricity Utility Company as Heat Supplier

In 1993 the energy supply company NRGi established their first district heating system. The plant was situated in Tranebjerg on Samsø and is based on straw. The company has now established an additional system on Samsø in 2001-02, based on wood chips and solar heating. The plant is situated in Nordby/Mårup in the very north of the island.

NRGi organises district heating systems according to a standard concept. Information in relation to possibilities of district heating is passed on in co-operation with local interest groups. Direct contact to the heat consumers is taken. Consumers can take option on connection to future district heating. The price for an option is symbolic 13 Euro.

The main arguments for connecting to district heating is rational use of energy, less complex running and maintenance compared to individual heating solutions and normally also a saving on the heating bill.

An outline plan for a project will only be established when at least 70% of consumers using oil burners have taken option in a district heating solution. An outline plan is the basis for loan guarantees established by the Municipality.

Furthermore, an application on financial support from the Danish Energy Agency is brought forward as part of the outline plan. If successful on such issues, detailed planning and tender procedures can go ahead.

Under the construction, the consumers using electricity for heating purposes are offered support from a national scheme if converting to district heating.

Tranebjerg

Today 85% of the heat supply to Tranebjerg is co-

vered by the district heating plant. The system runs on a straw burner with a 3 MW effect. 263 residents, small enterprises and institutions are connected to the grid.

The total heat consumption in a normal year roughly amounts to 9,500 MWh. The annual fixed price for connection for a resident is 300 Euro and the price for heat 85 Euro per MWh. The total cost for the whole district heating system was 3.5 million Euro in 1993 prices. The project was not subsidised by the Danish Energy Agency.

Nordby/Mårup

In August 1998 the citizens in Nordby and Mårup organised a working group on district heating, evaluating the establishing of one common district heating system for the two villages.

In 1999 decision was taken to forward a proposal to NRGi to realise the project. The heat consumers using oil burners took option in June 1999, 78% in Nordby and 83% in Mårup. This was sufficient for a detailed planning to take off.

Civil work started in June 2001. The first of the 178 consumers were connected to the heating system in November 2001. The whole project was finished in April 2002.

The distance between the two villages is 1,6 km and the plant is situated between the two villages. The plant consists of one 900 kW wood chip burner and a 2500 Square meter solar heating system with the maximum capacity of 2.2 MW.

The total price for the project is 2.75 million Euro. The Danish Energy Agency has given support worth 1.2 million Euro. The annual fixed price for connection for a resident is 300 Euro and the price for heat 79 Euro per MWh.



The Heating Plant situated between Nordby and Mårup