# CUSTOMER CASE





# **Nakskov District Heating**

## District Heating

Denmark

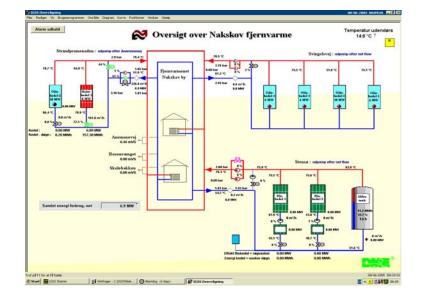
## **Plant Description**

In 2004 Nakskov District Heating was expanded with a new wood chip-fueled fired district heating plant and a common accumulator tank. Nakskov District Heating supplies over 50 pct. of Nakskov municipality's heating requirements.

Investment in a new SCADA system for the entire district heating supply occurred at the same time concurrently with the expansion of the new district heating plant. The boiler control and the integration of Nakskov District Heating's 3 plants encompass:

- Stensø the new wood chip-fueled district heating plantwith 2 x 9.5 MW wood chip boiler 1,800 m<sup>3</sup> accumulator tank.
- Strandpromenaden current stubble-fueled district heating plant with 1 x 8 MW stubble boiler and 1 x 10 MW oil boiler.
- Svingelsvej current oil-fueled district heating plant with a 28 MW oil boiler installed. Technical grease is used as fuel.



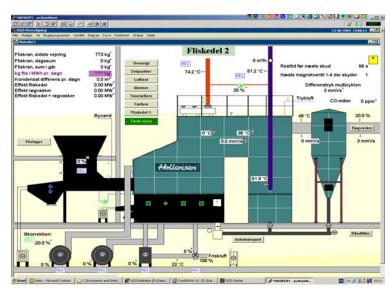


# **CUSTOMER CASE**

The total heat production in 2004-2005 was about 104,000 MWh. Peak consumption of bio-fuel has been about 200 tons of wood chips and about 50 tons of stubble in a 24 hour-period.

#### **IGSS**

The plant has three IGSS single-user systems, each with 5,000 objects and Winpager for alarm call announcement. Dansk Miljø- & Energistyring A/S is the supplier of the SCADA system with appertaining integration systems between the 3 plants.



## Requirements for the new SCADA system were:

- Maximum heat production on bio-fuels.
- Optional prioritization of boiler performance and load, determined by actual city heating needs and heating volume in the accumulator tank.
- Centralized control of outlet from the 3 plants.
- Completely integrated system at all 3 plants.
- SCADA operator stations at all plants and remote operator stations at the watch personnel.
- Biggest possible security in case of boiler failure and communication errors.

#### **Owner**

Nakskov District Heating is owned by the municipality of Nakskov.

### **System Integrator**

Dansk Miljø- & Energistyring A/S

