

Exclusive ACI's European Biomass to Power Conference Site Visit Tours, 7th of November 2017

Studstrup Power Station

Since 1968, the Studstrup Power Station is located near Kalø Vig north of Aarhus and has a total capacity of 714MW electricity and 986MJ/s district heating. The power station has two units - units 3 and 4 – which were put into operation in 1984 and 1985. These have since then been modernized regularly. Today, unit 4 is taken out of day-to-day operation and is held in reserve.

Studstrup (I)



Studstrup (II) From 2014 to 2016, Studstrup Power Station's unit 3 was converted making it able to use wood pellets instead of coal. The conversion makes Studstrup Power Station one of the biggest biomass-fuelled power stations in the world. In future, it is expected to produce district heating based on biomass for around 106,000 Danish homes as well as green electricity equivalent to the annual consumption of around 230,000 Danish homes.

Studstrup (II)



Skærbæk Power Station

Skærbæk Power Station have since 1951 been situated at Skærbæk on the northern side of Kolding Fiord. Today, the Skærbæk Power Station consists of block 3 from 1997 with a capacity of 392MW electricity and 447MJ/s heating. At the commissioning in 1997 the Skærbæk Power Station's unit 3 set the world record of natural gasfired plants with a total efficiency of 49 % at 100 % power production. At combined heat and power production the plant can achieve a total efficiency of 92 % which makes it one of the world's most efficient power stations.

Skaerbaek (I)



From 2015-2017 Skærbæk Power Station is converting from natural gas into wood chips. The conversion means not only a whole new fuel storage and -logistic setup, but also two new boilers. The open wood chip storage facility has a maximum height of 30m and can store up to 80,000m³ of wood chips. This equates to approximately nine days of maximum heat production at Skærbæk Power Station. The green Skærbæk Power Station is expected to be ready for the next heating season. From then on, the power station will use only wood chips produced from wood waste for the production of district heating to the Triangle Region Denmark

Skaerbaek (II)

