

Heat Production Optimization Danfoss Deliveries

Heating area

Architecture: single district heating network

Size: 1600 buildings

City: Heatington





Production units

Gas boiler

Name: GB Max heat: 5,0 MW

Production costs: 500 DKK / MWh(th) CO_2 emissions: 215 kg / MWh(th)

Gas consumption: 1,1 MWh(gas) / MWh(th)



Oil boiler

Name: OB Max heat: 4,0 MW

 $\begin{array}{lll} \mbox{Production costs:} & 700 \mbox{ DKK / MWh(th)} \\ \mbox{CO$_2$ emissions:} & 265 \mbox{ kg / MWh(th)} \\ \mbox{Gas consumption:} & 1,2 \mbox{ MWh(oil) / MWh(th)} \end{array}$



Gas motor

Name: GM Max heat: 3,6 MW Max electricity: 2,7 MW

Production costs: $1100 \, DKK / MWh(th)$ CO_2 emissions: $640 \, kg / MWh(th)$

Gas consumption: 1,9 MWh(gas) / MWh(th)



Electric boiler

Name: EK Max heat: 8,0 MW Max electricity: -8,0 MW

Production costs: 50 DKK / MWh(th)

