

DK, Thisted district heating



General

Owner	Thisted Varmeforsyning (the local consumer owned district heating company)	Operator	Thisted Varmeforsyning
Region	Thisted		

Project

Inhabitants connected	5016 (13000 inhabitants in town)	Design of the DH	Water based with pre-insulated pipes
Other uses (drinking water, cascade uses...)	No	Production of heating and/or cooling	For district heating
Planning of the operation (from pre-studies to full completion)	1980 - 2001	Dates of beginning and end of construction	1982 - 1984
Administrative permits	None	Difficulties faced	Production from cooler reservoir due to declining transmissivity in first tested deeper reservoir. Tax on power for electric heat pump causing shift to absorption heat pumps.
Comparison with fossil energies	/		

Financing

Investment for geothermal well

6 million euros for two wells

Investment for geothermal heating station

6 million euros

**Investment for DH network and substation
Amount of Subsidies if any**

Not part of geothermal plant
2,3 million euros in EU grants

Financing (banks, funds, PPP...)

Owner, former co-owner and EU grants

Cost of the MWh sold

Not applicable. Consumers pay all costs for heat from the net. This includes network costs and costs for heat production from different heat production units.

Technical

Installed capacity (MWth)

78

subsurface and surface technical schemes

One production and one injection well. Absorption heat pumps driven by straw boiler.

Operating Temperature of the DH

Winter/summer:
Supply: 76/70 °C;
Return: 40/44 °C

Temperature of the geothermal resource (production - injection)

43 °C / 11 °C

Geothermal flow rate

Up to 200 m³/h

Heat Pump if any (power in Mwe and COP)

Absorption heat pumps: 7,7 MWth / COPth 1,7

Innovation if any

The use of absorption heat pumps driven by straw district heating boiler, which makes it free to drive the heat pumps.

DH Length

219 km