

General

Description: In response to oil price crisis and in solidarity with the national effort, in 1982 the idea of performing an operation of geothermal begins at Alfortville. The DH heats 5400 housings. Wells are dug down to 1.8 km to the Dogger's aquifer.

Owner	SMAG	Operator	DALKIA
Region	Ile-de-France		
Inhabitants connected	5400	Design of the DH	
Others uses (drinking water, cascade uses...)	None	Production of heating and/or cooling	Heating (98%) + Sanitary hot water (2%)
Planning of the operation (from pre-studies to full completion)	-	Dates of beginning and end of construction	1985
Administrative permits	-	Difficulties faced	<ul style="list-style-type: none"> *Long regulatory procedures * Difficulties to find adapted submersible pumps to realize well tests (deep aquifer) * Difficulties to drill in urban area with high population density: neighbourhood nuisances (noise) *Difficulties to work in urban area for the network construction * Lack of training and competencies on this type of equipment.
Comparison with fossil energies	-5% compared to gas price		

Financing

Investment for geothermal well	-	Investment for geothermal heating station	-
Investment for DH network and substation	-	Financing (banks, funds, PPP...)	-
Amount of Subsidies	-		
Cost of the MWh sold	-		

Technical

Installed capacity (MWth)	60GWth total installed capacity 13 MW of geothermal energy	Subsurface and surface technical schemes	-
Operating Temperature of the DH	95°C	Temperature of the geothermal resource (production - injection)	72°C – 40 à 50°C
Geothermal flow rate	280 m3/h	Heat Pump (power in Mwe and COP)	
Innovation if any	-	DH Length	5,8 km