

General

Owner	OPDH 92 (Haut de Seine Habitat)	Operator	DALKIA
Region	Ile-de-France		

Project

Inhabitants connected	3500	Design of the DH	Pre-insulated district Hot water (max: 85°C go ; 50°C return)
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)	2008 to 2013	Dates of beginning and end of construction	Aug 2011/March 2013
Administrative permits	Exploration permit with public consultation Heating station with simple administrative declaration if under 20 MW) Building permit Exploitation permit	Difficulties faced	*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	5450 k€ HT	Investment for geothermal heating station	TOTAL: 9 715 k€ HT
Investment for DH network and substation	1 720 k€ HT	Financing (banks, funds, PPP...)	
Amount of Subsidies	4 850 k€ HT ADEME (Geothermal doublet + heat pump) 500 k€ HT Ile-de-France Region (for the extension of the district network)		DALKIA own funds
Cost of the MWh sold	80 € HT / MWh (everything included)		

Technical

Installed capacity (MWth)	5,7 MW of geothermal energy 15 MW full power of the district heating station (gas)	Subsurface and surface technical schemes	
Operating Temperature of the DH		Temperature of the geothermal resource (production - injection)	39°C production well 14,5°C injection well
Geothermal flow rate	200 m ³ /h	Heat Pump (power in Mwe and COP)	7,2 MW of which Heat Pump = 1,5 MWe ; COP = 4,8
Innovation if any	New sandy aquifer exploited in Paris Basin	DH Length	5 km