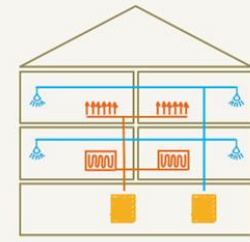


Eco-district, Nice

The district heating system, specific to this Eco-district in Roquebrune Cap Martin, Nice is quite innovative. It is based on the treated water rejected by water treatment plant located 500m far from the ecodistrict. This water is used as the cold source of 8 heat pumps for DHW production and 5 heat pumps for heating and cooling.



F1.2

Key facts

Buildings	7
Location	Nice, France
Construction	2012
Heated space	280 apartments
Level of insulation	very good
Heat pump and source	
Number of	8x 12kW HP for DHW 5x HP for heating/cooling
Heat source	treated water from water treatment plant
Heating system	
Type	central
Heat distribution	collective
Heating temperature	45°C
Domestic hot water	
Type of system	central
DHW production	collective HP
Max. temperature	55 °C
Hot water storage	17,000 l
Other information	
Substations	4
Consumption for DHW, heating, Cooling	40 kWh _{ep} /m ² .yr
Investment costs	1 M€ for geothermal installation
Renewables Ratio	69%



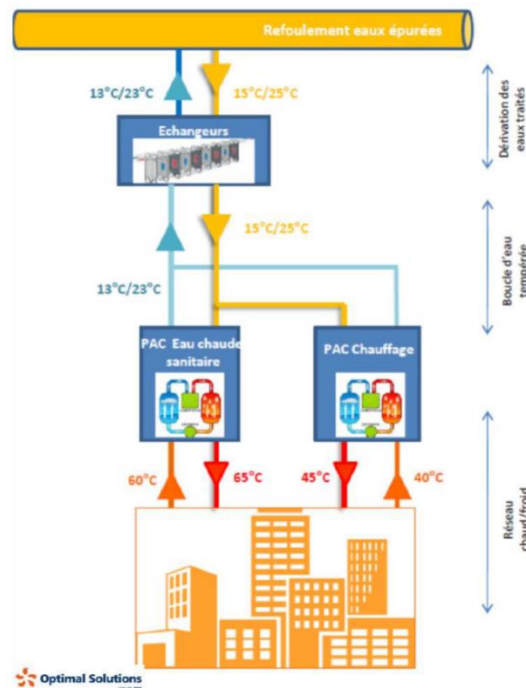
This first part of ecodistrict gathers 7 buildings of dwellings, offices, a nursery: representing almost 20000 m².

The district heating system, specific to this ecodistrict is quite innovative. It is based on the treated water rejected by a water treatment plant located 500 m far from the ecodistrict.

This water is used as the cold source of 8 heat pumps for domestic hot water production and 5 heat pumps for heating and cooling.



Eco-district, Nice



Description of the technical concept

The system consists of:

- Boreholes to collect the treated water (the water is collected at a temperature ranging from 12°C to 25°C and rejected at a temperature between 7°C and 30°C)
- 5 medium temperature (45/40°C) heat pumps (CIAT Dynaciat®) for heating and cooling (distribution is ensured by fan heaters)
- 8 high temperature (65/60°C) heat pumps (Heliopac Solerpac®) for domestic hot water production.
- Water tanks for domestic hot water storage (17000 liters)



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