**Eco Quarter Capazur, Nice, France**

New built eco-district in Roquebrune Cap Martin, collective heat pumps on waste heat for space heating and special high temperature collective heat pumps for domestic hot water, boosting the low temperature source.

### Key facts

**Building**
- **Location**: Nice, France
- **Construction**: 2012
- **Heat distribution**: in building
- **Heated area**: 20,000 m² living
- **Level of insulation**: good

**Heat pump and source**
- **Number of heat pumps**: 8 x 12kW HP for DHW, 5 x HP for heating/cooling
- **Operation mode**: monoenergetic
- **Heat source**: Waste heat for DHW HP, Waste heat for space heating HP
- **Brand and type**:
  - 8 HT Heat Pumps from Heliopac GEOPAC
  - 5 Heat Pumps (CIAT Dynaciat®)
- **Refrigerant**: Heliopac R134a, CIAT R410A
- **Sound level**: 55 dB

**Heating system**
- **Heat demand**:
- **Heating temperature**: 45 °C

**Domestic hot water**
- **Type of system**: collective
- **Max. Temperature**: 65°C
- **Circulation system**: two pipe with substations
- **Legionella measures**: thermal
- **Storage size**: 17,000 litres
- **Number of storage tanks**: 6

**Other information**
- **Electric energy Consumption year**: 40 kWhep/m².yr
- **Investments costs**: 1 m€
- **PV installation**:

**More information**
- [Promotion video](#)
Eco Quarter Capazur, Nice, France Technical details

A process patented by Veolia, ENERGIDO recovers heat from wastewater. Wastewater, put in contact with a heat exchanger located outside the sewer system, conveys its energy to a fluid feeding the heat pump located within the facility. The latter returns the energy by producing water at the desired temperature (40° to 60°C) that feeds the heating network. Source Veolia

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 space 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 (17,000 liters)

<table>
<thead>
<tr>
<th>Sub stations</th>
<th>Number of DHW Heat Pumps</th>
<th>Storage tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building A&amp;B</td>
<td>3*12kW</td>
<td>3*2000 litres</td>
</tr>
<tr>
<td>Building C</td>
<td>1*12kW</td>
<td>3000 litres</td>
</tr>
<tr>
<td>Building E</td>
<td>2*12kW</td>
<td>4000 litres</td>
</tr>
<tr>
<td>Building F</td>
<td>2*12kW</td>
<td>4000 litres</td>
</tr>
</tbody>
</table>

Source: Heliopac