



ENERGIDO SUPPLIES THE CAP AZUR ECO-DISTRICT

Municipal

**Using the calorific value of wastewater
- circular economy.**

| The challenge

To heat a new 7 ha Eco-District, CAP AZUR, the municipality of Roquebrune-Cap-Martin had the idea to recover energy from the wastewater treatment network located nearby.

Initially, the contractor, Bouygues Immobilier, had thought of using solar panels.

| Veolia's solution

After conducting a comparative study, the contractor and the municipality selected the Energido process to recover the calories generated by the treated water of the municipal wastewater treatment plant operated by Veolia.

Developed by Veolia Eau, this process is located outside of wastewater networks and remains invisible from the outside.

Treated water is put into contact with a heat exchanger and transfers its energy to a fluid which supplies a network of 14 heat pumps (HPs).

Thus, the calories taken from the wastewater at the treatment plant outflow pipe provides sanitary hot water, heating in winter and air-conditioning in summer to 300 housing units distributed over 20,000 m².

Veolia has built and operates this system in partnership with EDF-OS and Sade.



Roquebrune-Cap-Martin, France



Contract Facts:

Duration: WWTP
20 years, since 2010

100%

of the cooling and heating needs
are covered

20,000 m²

heated and air-conditioned

Fossil energy economy:

1,000 MWh/year



Process description

- Total HP power: 800 kW thermal power distributed over 7 HP substations
- Surface heated: 20,000 m²; 300 low-energy housing units including a tourist residence of 70 flats with swimming pool, a nursery and offices,
- Fossil energy economy: 1,000 MWh/year
- CO₂ economy: 84 T per year
- Renewable energy coverage rate: 75%
- Funding: Bouygues Immobilier (€800K), EDF-OS (€250K) - Ademe (€200K).

| The benefits

- Energido covers 100% of the Eco-District's heating, cooling and sanitary hot water needs.
- A 15% saving on the annual energy bill on average.
- Ademe helped finance this innovative project.
- The Eco-District won the "Ecoquartier-performance innovation" award.



An exemplary operation. The district is heated and cooled all year round using a local, renewable and invisible energy.

Patrick CESARI, Mayor of Roquebrune-Cap-Martin, Chairman of the French Riviera Community



PLANET

Reduction of greenhouse gas emissions by using renewable energy.
Environmental Management System.



WOMEN & MEN

Training passport for each employee.
Local agents and suppliers.