



# TOULOUSE METROPOLE: BLAGNAC'S HEATING NETWORK

*Municipal*

**Energy production via geothermal energy and biomass.**

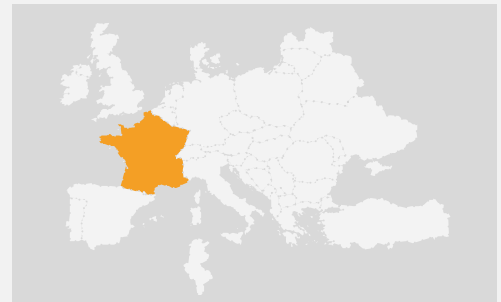
## | The challenge

As part of its energy transformation, Toulouse Métropole launched a new project in 2017 called Blagnac Énergies Vertes (Green Energy) to expand, manage and optimise the urban heating network in Blagnac, with a renewable energy coverage rate of over 50%, and connect it to the Toulouse-Blagnac airport, at a competitive price. Originally supplied by a geothermal well, the Blagnac heating network should be equipped with a new biomass heating plant. With this project, Toulouse Métropole wanted to continue the development of its collective heating network by combining renewable energy and heat from the combustion of recovered wood chips.

## | Veolia's solution

As part of a 20-year contract, Veolia has committed to securing the existing clean and natural geothermal resources, expanding the heating network for new users and optimising the proportion of renewable energy used.

- Optimisation of the use of the deep geothermal borehole in the Ritouret district with a 2 km extension of the network and the re-commissioning of a second deep well to supply a water sports centre with 85% geothermal energy.
- The construction of a wood biomass heating plant, which was commissioned in October 2021, and which currently supplies part of the Blagnac heating network, including the airport, multi-family housing units in the Cèdres district, and the Guillaumet college.
- Securing the network and expanding it. It now extends over 6 km, supplies the equivalent of 2,500 homes and has 40 delivery points.



*Blagnac, France*

### Contract Facts:



Duration: 20 years since 2017  
Type: delegated public service, concession

**2,500 households**  
served

**1.7 MW** capacity of the biomass heating plant

**20% savings** for users

a network of over **6 km**  
**40** delivery points

- The **innovation** involved: communicating PLCs were installed on the various infrastructures to send information to Veolia's Hubgrade supervision centres, such as temperature and consumption in real time. As such, customers can be advised on managing their consumption and the facilities can be remotely managed and monitored.

## | The benefits

### Sustainable development and savings for the budget of the equivalent of 2,500 households.

- **Cheaper and greener** energy for the city:
  - 20% savings for residents,
  - 75% is the share of renewable energy and energy recovery (REER) distributed.
- Performance and ecology combined: energy delivered contains only 52 g of CO2 per MWh delivered and avoids more than 2,067 tonnes of CO2 per year.
- The new biomass heating plant contributes to the momentum of the wood industry in the region. In fact, the wood chips used come from certified forests located less than 100 km from Blagnac.
- Toulouse-Blagnac airport, a major consumer of heating, has been able to reduce its ecological impact by connecting to the Blagnac heating network. Its main boilers are now powered by renewable energy.
- Automation, monitoring and control of facilities by Veolia Hubgrade.
- The Blagnac network was awarded the Amorce eco-network label in 2020 and 2021, which recognises environmentally, economically and socially virtuous networks.



*This biomass power plant is a major investment by Toulouse Métropole in renewable energy and also a tool in the fight against fuel poverty. Therefore, at a time when energy prices are soaring, we are enabling the people of Blagnac to make substantial savings on their heating bills. We want to enable all the inhabitants of the Métropole to combine ecology and purchasing power.*

*Jean-Luc Moudenc, Mayor of Toulouse, President of Toulouse Métropole.*



### VEOLIA'S PURPOSE: committing to a multifaceted performance



#### SOCIAL

This offering guarantees resident comfort and reduces energy precariousness while also showcasing housing assets.



#### COMMERCIAL

The cost of heat for users is reduced and stabilised. Veolia's offering will result in savings of €100 per year.



#### ENVIRONMENTAL

The green energy produced has reduced CO2 emissions by 35%. The proportion of renewable energies in Toulouse Métropole has risen from 67% to 74%.



#### HUMAN RESOURCES

Veolia has hired apprentices to perform 300 hours of labour over the term of the contract.