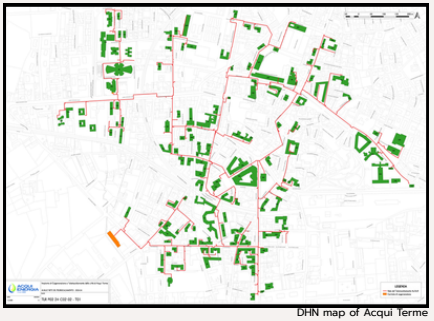
Acqui Terme

Italy

ENABLE DHC

Challenges

The system is powered mainly by natural gas, featuring a "traditional" generation portfolio of CHP endothermal engines and boilers. The lack of thermal storage also poses a challenge for the network, complicating the balance between supply and demand. While there is significant geothermal potential, the specifics of the project are yet to be defined exactly, in order to balance the exploitation opportunity and the resource management and preservation



DHN map of Acqui Terme
Source: Acqui Energia

Opportunities

The pilot site has created a task force composed of Ambiente Italia, OPTIT, EGEA, and municipal representatives. Preliminary studies are investigating how to optimally design (and use) the geothermal energy available in Acqui Terme, boosted by heat pumps, and thermal energy storage. The design will also account for the uncertainty regarding key framework drivers (e.g., commodity prices, CapEx). The team mapped out and activated relevant stakeholders, including regional and provincial public bodies, the hotel association, consultancies, and universities. Beyond the energy transition, they will investigate the expansion of the network, adding large users, such as commercial and industrial buildings.

Key facts

Population: 18.962
Network size: 8.9km
Customers served: 134
Heat produced: 34,8 GWh/year
Heat sold: 34,2 GWh/year (2023)
Supply/return temp.: 85°C/65°C

enabledhc.ambienteitalia.it

Co-funded by the European Union