

## **Pre-feasibility analysis of a HT-ATES system using numerical simulations**

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ATES systems store thermal energy in the underground in form of water that may then be used for heating and cooling applications combined with heat pumps. This study presents modelling and simulations of an ATES system storing the residual thermal energy derived from an Organic Rankine Cycle plant which is combined with a biomass boiler. The residual thermal energy is stored as hot water in the aquifer during the summer period and used to serve a district heating network during the winter.

### Acknowledgments

This work has been financed by the Research Fund for the Italian Electrical System under the Three-Year Research Plan 2022-2024 (DM MITE n. 337, 15.09.2022), in compliance with the Decree of April 16th, 2018”.