



Press Release

Geothermal energy is digging in across Europe

EurObserv'ER releases **GEOTHERMAL BAROMETER 2025**

Free Download: <https://www.eurobserv-er.org/geothermal-energy-barometer-2025/>

Paris, October 2025

Key data for the geothermal sector (excluding heat pumps) in the European Union in 2024

6.64 Mtoe	Primary energy production from geothermal sources in the EU-27 in 2024 (6.62 in 2023)
993.4 ktoe	Geothermal heat consumption in the EU-27 in 2024 (949.5 ktoe in 2023)
6.2 TWh	Gross geothermal electricity production in the EU-27 in 2024 (6.3 TWh in 2023)
1 047.7 MW	Installed geothermal electricity capacity in the EU-27 in 2024 (1 047.7 MW in 2023)
878 MW	Net geothermal electricity capacity in the EU-27 in 2024 (882 MW in 2023)

Key findings from the barometer

According to EurObserv'ER, primary energy production from deep geothermal sources in the European Union (excluding heat pumps, which fall under shallow geothermal) remained broadly stable between 2023 and 2024, at around 6.6 million tonnes of oil equivalent (Mtoe).

However, this overall stability hides contrasting trends. Geothermal heat consumption has grown significantly (+4.6%), reaching 993.4 ktoe in 2024, driven by the development of new district heating networks. Eight new systems were commissioned in 2024, adding 110 MWth of capacity, particularly in France, Germany, Poland, and the Netherlands. In total, the European Union now has 308 active geothermal district heating networks.

At the same time, geothermal electricity production dipped slightly (–0.9%), reaching 6.2 TWh in 2024. This decline is mainly due to lower output from Italian plants, which account for just over 90% of European production. Installed capacity remained unchanged at 1,047.7 MW, with a net exploitable capacity of 878 MW.

The next barometer will cover renewable energy in transport



LINKS and FREE DOWNLOADS

- **ANNUAL REPORT:** “The State of renewable energies in Europe”, 23rd edition, <https://www.eurobserv-er.org/category/all-annual-overview-barometers/>
- **DATABASE:** <https://www.eurobserv-er.org/online-database>
- **GRAPHS:** <https://www.eurobserv-er.org/press-corner-graphs-and-tables>
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About EurObserv'ER

EurObserv'ER barometers are regular publications for the European media, providing up-to-date insights and data on renewable energy developments—covering solar, wind, hydro, geothermal, and biomass—both in Europe and worldwide. All barometers are freely available on the project's website

Note

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