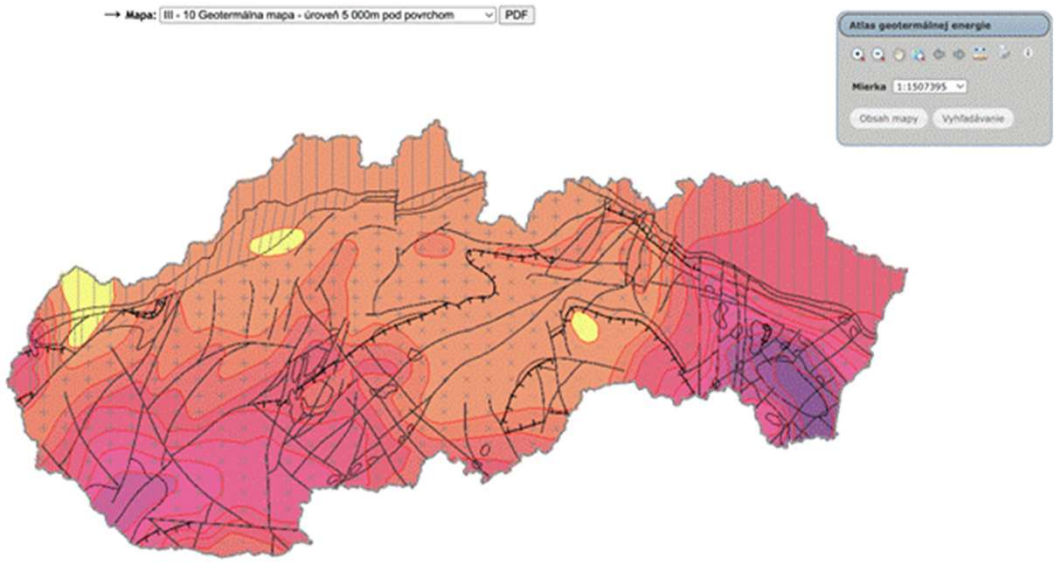
CEEGEO
Central and Eastern European Geothermal Initiative

Geothermal energy in Slovakia

Nolan Theisen, GreetGEO Final Conference, Zagreb, 29th October 2026

Geothermal potential

Foundational *Atlas of Geothermal Energy of Slovakia* (1995) and decades of exploration provides substantial mapping of geothermal resource base BUT…



According to ŠGÚDŠ:

Sustainable potential

-sustainable potential for short-term production period: 2 745 MWt
-sustainable potential for long-term production period: 1 102 MWt

Development potential

-total developable potential for short-term production period: 2 650 MWt
-total developable potential for long-term production period: 1 004 MWt

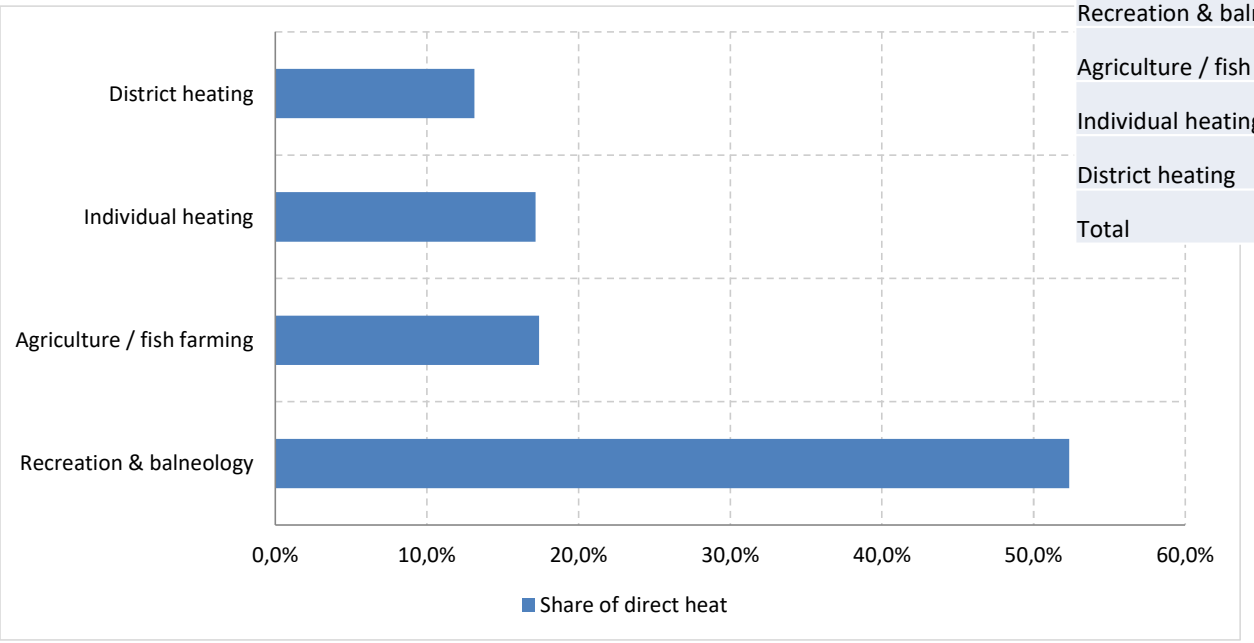
CEEGEO
Central and Eastern European Geothermal Initiative

What is missing in Slovakia?

- Applicable data
  - ...no recent, updated, works assessing of economically recoverable or sustainable resource potential.
- Knowledge-base
  - Conceptual education and approach
  - Expert community
  - Public understanding
- National strategy
  - Technology specific target
  - Explicit DH roadmap
  - Dedicated public financing
  - Streamlined permitting

Direct geothermal heat use, 2020-2021

Geothermal DH: 5 sites and 7 wells (Galanta, Šaľa, Veľký Meder, Sereď, Kežmarok



Sector	Annual heat (TJ)	Share of total
Recreation & balneology	882	52.3%
Agriculture / fish farming	293	17.4%
Individual heating	289	17.2%
District heating	221	13.1%
Total	1685	100.0%

CEEGEO
Central and Eastern European Geothermal Initiative

Important developments

- 2025 EIA update (after intensive lobbying)
  - Should not exceed 3-months
- Košice project: 6 directional wells 2.9-3.6 km, well head temperature 125°C to 135°C flow rates 55-60 liters per second