

Thursday, 14<sup>th</sup> February 2019

Congress 2 - Shallow Geothermal Energy

14.00 - 14.30

## **New approaches for fostering the use of shallow geothermal energy in central Europe**

### **Results from the Interreg Central Europe project GeoPLASMA-CE**

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The use of shallow geothermal energy for heating, cooling and seasonal heat storage has the potential to be a key technology for decarbonizing and de-polluting the heating and cooling market in Europe. In the light of climate change, accompanied by more frequent and longer heat waves, cooling based on shallow geothermal might get as important as heating. Still, the market share of shallow geothermal is rather small in a European context. Moreover, this technology faces a strong competition with less efficient but cheaper renewables like air based heat pump systems and air chillers.

Decision makers in central Europe are still hardly aware of the advantages of shallow geothermal energy. On the one hand this behavior reduces the willingness to invest in this technology. On the other hand, this results into low-efficient legal and administrative frameworks for licensing and managing the use of shallow geothermal.

The EU Interreg Central Europe project GeoPLASMA-CE aims to address these challenges and foster the use of shallow geothermal technologies in Central Europe. The project team consists of the Geological Survey organizations from the central European countries Germany, Poland, Czech Republic, Slovakia, Austria and Slovenia, complemented by the two private enterprises located in Saxony (GiGa infosystems and geoENERGIE Konzept GmbH), the German Geothermal Association (Bundesverband Geothermie e.V.), the AGH University of Krakow as well as the city administration of Ljubljana.

Running from July 2016 to June 2019, GeoPLASMA-CE addresses:

- Harmonizing knowledge and bridging gaps how to assess and manage shallow geothermal resources;
- Establish a joint, web based infrastructure, to disseminate knowledge and connect experts on both, a regional as well as on a national basis;
- Demonstrate the inclusion of shallow geothermal energy concepts in heating and cooling supply strategies in six pilot regions;
- Finally, the results achieved in GeoPLASMA-CE lead into a joint strategy how to foster the use of shallow geothermal in central Europe.

In the proposed presentation, I want to show the main barriers and opportunities for including shallow geothermal in the six involved countries. I want to summarize elaborated harmonized workflows for mapping and modelling resources and conflicts of use, joint criteria for an efficient and sustainable management of use and identified concepts how to include shallow geothermal in heating and cooling strategies in the chosen pilot regions. Furthermore, I want to exhibit the heart of GeoPLASMA-CE, the joint web portal, which covers web based information services as well as a knowledge platform. The beta-version of the GeoPLASMA-CE web-portal can already be visited at <https://portal.geoplasma-ce.eu>.