DISCOVER MORE ABOUT **GeoPLASMA-CE**

www.interreg-central.eu/GeoPLASMA-CE

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WHAT WE DO

GeoPLASMA-CE represents an Interreg Central Europe project dealing with different aspects of shallow geothermal use for heating and cooling in both, urban as well as non-urban regions in Central Europe. In cooperation with geological survey organizations, universities, non-profit organizations, administrative bodies and private expert companies, new management strategies for a reasonable and sustainable use of shallow geothermal application will be explored in 6 different pilot areas - Vogtland/ W-Bohemia (1), Wałbrzych/ \bigcirc Broumov (2), Kraków (3), Vienna (4), Bratislava (5) and Ljubljana (6).



TAKING COOPERATION FORWARD

Partners from six Central European countries join their forces to improve environmental management in urban and non-urban areas.

Austria

Germany

Poland

Slovakia

Slovenia

and 18 Associated Partners from 8 EU countries

WHO WE ARE

Geological Survey of Austria (GBA)

Czech Republic

Czech Geological Survey (CGS)

German Geothermal Association (BVG) geoENERGIE Konzept GmbH (geoENERGIE) Saxon State Office for Environment, Agriculture and Geology (LfULG) GiGa infosystems (GiGa)

Polish Geological Institute National Research Institute (PGI-NRI) AGH University of Science and Technology (AGH UST)

State Geological Institute of Dionýz Štúr (SGIDS)

Geological Survey of Slovenia (GeoZS) City of Ljubljana (COL)



Mission and vision

GeoPLASMA-CE aims to foster the share of shallow geothermal use in heating and cooling strategies in Central Europe. Geothermal methods are a locally available, endogenous heat source not affected by emissions, which is a present and future key technology in order to reduce emissions hazardous to climate and air quality. The project intends to create a web-based interface between geoscientific experts and public as well as private stakeholders to make the existing know-how about resources and risks associated to geothermal use accessible for territorial energy planning and management strategies in Central Europe.

Who funds us

Our project is funded by the Interreg CENTRAL EUROPE program that encourages cooperation on shared challenges in Central Europe.

With 246 million Euro of funding from the European Regional Development Fund, the program supports institutions to work together beyond borders to improve cities and regions in Austria, Croatia, the Czech Republic, Germany, Hungary, Italy, Poland, Slovakia and Slovenia.



GeoPLASMA-CE

SHALLOW GEOTHERMAL ENERGY PLANNING. ASSESSMENT AND MAPPING STRATEGIES IN CENTRAL EUROPE





GeoPLASMA-CE

The project aims at transferring knowledge from scientific experts to public authorities and related entities in the participating countries.

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www.interreg-central.eu/GeoPLASMA-CE

FACTS AND **FIGURES**



Outputs planned until June 2019

€ 2.896.0

investment value

Outputs

GeoPLASMA-CE will produce 8 main outputs generated in 4 thematic work packages. Three main outputs represent tools, 3 main outputs represent strategies and action plans, 1 main output represents a pilot action and 1 main output covers specific training. The main results will be:

- A multilingual web-portal for integrative assessment and management of shallow geothermal methods for heating and cooling. The web-portal is an information tool for the dissemination of geothermal resources and risks of land-use conflicts associated to the use of geothermal methods. Furthermore, it will act as an international expert platform for Central Europe regions in order to disseminate standards and approaches.
- 6 energy planning strategies for an integrative use of shallow geothermal methods in selected pilot areas, covering rural regions and urban areas. 3 target areas are covering trans-border regions.
- Training for regional stakeholders concerning integrative management strategies for shallow geothermal applications at the selected target regions.

TOOLS

MARCH

2019

Work package T1 will produce a comprehensive web portal for the use of shallow geothermal systems for heating and cooling (www.geoplasma-ce.eu). The web portal will consist of a web based decision support and information tool based on geoscientific 3D models applied in 6 pilot areas. To reach stakeholders outside the pilot areas, a web based expert platform including a knowledge repository and communication tools will be developed.

A. 4

Work package T3 will provide databases of key values determining shallow geothermal potentials and risks as well as thematic maps for the 6 pilot areas. In addition, geoscientific 3D models showing the conditions for shallow geothermal use will be established for at least two of the 6 pilot areas.

Emphasize is also set to define harmonized workflows and guality requirements on so called Thermal Response Tests (TRT), which constitute the most important method to investigate the performance of borehole heat exchangers. The elaborated methods will be tested and calibration tests performed within GeoPLASMA-CE.



Estimated date of finalization

PILOT ACTIONS

Work package T3 covers pilot actions in 6 selected areas, located in Germany, Austria, Poland, the Czech Republic, Slovakia and Slovenia. The activities cover assessment of existing and new data, which determine potentials and risks of shallow geothermal energy use. The harmonized workflows, elaborated in WPT2 will be applied in the pilot areas. The outcomes of these pilot actions feed into the strategies, developed at WPT4.

> Estimated date of finalization

STRATEGIES AND **ACTION PLANS**

Work package T2 will lead to an inventory of methods and workflows for mapping, planning, assessment and monitoring of geothermal energy. The outputs will be summarized in a multilingual guideline, the so called catalogue of success criteria for a sustainable management of shallow geothermal use.

Work package T4 will produce 6 strategies for the use of shallow geothermal energy at the investigated pilot areas. These strategies will be produced in cooperation with local stakeholders and intend to feed in the local and regional policy circles.

In addition, a joint strategy for fostering the use of shallow geothermal energy in Central Europe will be summarized and spread to other regions via www.geoplasma-ce.eu.

TRAINING

Work package T4 will provide a knowledge transfer of the developed strategies and action plans to stakeholders in the pilot areas. The transfer of knowledge will be realized by individual consultancy of policy makers and public accessible training. Training will be provided in national languages.

Moreover, the achieved results and knowledge will be transferred to other regions in Europe through expert workshops (WPT2 & WPT4) and public events (WPC). The web portal itself (WPT1) will act as a communication and knowledge transfer.

Estimated date of finalization

MARCH

2019

MAY 2019

Estimated date of finalization