

International Workshop on Mapping Shallow Geothermal Energy for Spatial Energy and Environmental Management Plans – challenges and approaches for the next decade 2021 - 2030

Offenburg, Germany March 4, 2020, 12:00 – 17:00,

Linked to the Geotherm 2020 Conference and Fair

Update #1: Detailed program

About the workshop

The use of shallow geothermal energy for heating, cooling and underground thermal energy storage is continuously gaining importance in the context of climate change mitigation (e.g. urban heat islands) and fulfilling the EU decarbonisation strategies for the period of 2021 – 2030. On the one hand, this implies opportunities for significant gain of importance for shallow geothermal energy use. On the other, a boost of shallow geothermal use. enhances the pressure on planners and authorities to avoid negative implications on the subsurface and loss of system efficiencies due (possibly negative) mutual interference. Spatial planning as well as environmental management plans are important instruments and, honestly spoken, preconditions to ensure the large-scale inclusion of shallow geothermal into the decarbonization and climate change mitigation strategies across Europe.

The workshop aims at exchanging experiences and ideas and discussing concepts on:

- **Objectives, purposes of spatial plans and how to meet the requirements of the addressed target groups**
- **Contents of mapping and interfaces to meet the requirements of energy planning and environmental management**

In the workshop, we would like to address new challenges, novel concepts as well as the need for harmonizing the process of shallow geothermal mapping.

The workshop addresses researchers as well as users of spatial maps related to shallow geothermal energy use.

Program of the workshop

12:00: Start of the workshop and welcome address

- Welcome address by the organizers (G. Goetzl, B. Sanner, E. Di Sipio)

12:15: Session1- Short presentations (each 10 to 20 minutes)

- **C. Steiner (Geological Survey of Austria):** Mapping for urban areas in the Geo-ERA project MUSE
- **E. Di Sipio (University of Padua):** Geothermal mapping as a tool to develop an interface to facilitate shallow geothermal plant feasibility assessment by non-expert users: the Geo4Civhic experience

- **J. Epting (University of Basel):** City-scale solutions for the energy use of shallow urban subsurface resources - Bridging the gap between theoretical and practical resources
- **M. Fuchsluger (Geological Survey of Austria):** Resource mapping focused on energy planning for GeoPLASMA-CE and MUSE
- **J. G. Fritsche (Geological Survey of Hessen, Germany):** Mapping and publication of geothermal data in the federal state of Hessen, Germany
- **S. Rumohr (Geological Survey of Hessen, Germany):** Fact sheets for utilisation of near-surface geothermal energy with borehole heat exchangers
- **D. Bertermann (GeoZentrum Nordbayern):** Very Shallow Geothermal Potentials of Bavaria
- **F. Boettcher (Technical University of Munich):** Ressource mapping in the area of Munich city (preliminary working title)

14:30: Coffee Break

15:00: Session 2- Panel discussion and group work session

- Topic to be addressed: Objectives and requirements of mapping on shallow geothermal resources and limitations of use in the context of energy planning and environmental protection (activities depend on the number of registered participants).

16:15: Closing plenary

- Recap of the group work session and joint conclusions
- Discussion round on a joint article on the role of shallow geothermal mapping for energy- and environmental planning – how can the role of geoscientists be strengthened?
- Outlook on follow-up activities linked to this workshop (Shallow Geothermal Energy Days 2020)

Registration to the workshop

The registration will end on **February 21, 2020**. Please register to gregor.goetzl@geologie.ac.at.

About the Geotherm 2020

The Geotherm conference and fair is the largest annual event on geothermal energy use in central Europe. Geotherm 2020 will take place from March 5 to 6 at the location of the workshop. All sessions provide English translation. More information on Geotherm 2020 can be found [here](#).

Organizers of the workshop

The workshop is organized by the EU projects [GeoERA-MUSE](#) and [GEO4CIVHIC](#). Both projects address current challenges in promoting the use of shallow geothermal energy in Europe.