

Kulich, Jakob; Ott, Holger

## CO2 Storage options in Austria & current developments

*Chair of Reservoir Engineering, Montanuniversität Leoben, Österreich;*  
[jakob.kulich@unileoben.ac.at](mailto:jakob.kulich@unileoben.ac.at)

Austria is committed to becoming climate net-neutral by 2040, no later than 2050. Reducing the countries hard-to-abate CO<sub>2</sub> emissions will require the substantial application of CCS to reach this challenging goal. Due to legal regulation and missing public acceptance across Europe, storage sites for CCUS hubs are typically being developed offshore. This is especially challenging for landlocked countries like Austria where domestic storage is currently not developed and export of CO<sub>2</sub> can only take off once transport infrastructure is completed. The talk will shortly discuss the development of legal regulations concerning CCS in Austria and touch upon possible export routes to offshore storage sites. Afterwards new results on storage potential in hydrocarbon fields are presented and compared to already existing studies. Storage of pure hydrogen in porous media is an emerging technology that is hoped to be used for balancing fluctuations in renewable energy and decarbonizing heavy industry. At the same time geothermal energy production is seen as a key technology in providing green base-load energy for decarbonization of the heating sector in cities with district heating networks. The competitive usage of the Austrian subsurface as well the possible contribution of CCS to Austria's climate goals are finally being discussed. We believe that in the future, while all three technologies can significantly contribute to energy transition as well as the countries climate goals, CCS should not be neglected as only development of domestic CO<sub>2</sub> storage can bridge crucial time periods for hard-to-abate emitters.

**Session:** *Pangeo workshop: Mineral Raw Materials, and Energy Transition*

**Keywords:** *CO<sub>2</sub> storage potential in Austria, Competitive usage of the subsurface*