











6th Stakeholder Seminar of the EU Strategy for the Danube Region

Priority Area 2 "To encourage more sustainable energy"

'Underground energy storage in the Danube Region – possibilities and European perspective'

4th December 2019

Art'otel Budapest – 16-19 Bem rakpart, Budapest, Hungary

AGENDA

- 10.00-10.05: **Welcome and opening remarks: objectives and goals of the seminar Annamária Nádor** Priority Area Coordinator at Priority Area 2 'Sustainable Energy' of the EU Strategy for the Danube Region/ Mining and Geological Survey of Hungary
- 10.05-10.25: **Introduction on underground energy storage European research and technology perspective Serge van Gessel**, Chair of the EuroGeoSurveys GeoEnergy Expert Group / TNO, The Netherlands
- 10.25-10.40: Results of the ESTMAP project first pan-European assessment of underground energy storage potential *Vit Hladik*, president of ENeRG / Czech Geological Survey
- 10.40-11.15 Presentation of the study 'Underground energy storage facilities in the Danube Region with special attention to the use of underground gas storage infrastructures' Annamária Fehér, Tamás Mérő, Hungarian Gas Storage Ltd.
- 11.15-11.45: **Coffee break**
- 11.45-12.05: **The hydrogen value chain from production to applications** *Matthias Schlegel, Senior Project Manager, FICHTNER GmbH & Co. KG, Germany*
- 12.05-12.25: Introduction to the Blue Danube project (green hydrogen production and transport backbone in central and Eastern European countries along the Danube river) Rudolf Zauner, Hydrogen Center, Verbund, Austria
- 12.25-12.45: Underground storage of Hydrogen in porous media, the Austrian experience *Markus Pichler*, *RAG Austria-AG*
- 12.45-13.05: **Providing seasonal energy supply towards underground storage of Hydrogen in Slovakia Roman Zavada,** Nafta Slovakia













13.05-14.00: Interactive discussion with speakers and the audience – Moderator: Annamária Nádor, Priority Area Coordinator at Priority Area 2 'Sustainable Energy' of the EU Strategy for the Danube Region/ Mining and Geological Survey of Hungary

14.00-15.00 Networking lunch

'Underground energy storage in the Danube Region – possibilities and European perspective'

The EU Strategy for the Danube Region (EUSDR) is a macro-regional strategy adopted by the European Commission in December 2010 and endorsed by the European Council in 2011. The Strategy was jointly developed by the Commission, together with the Danube Region countries and stakeholders, in order to address common challenges together. The Strategy seeks to create synergies and coordination between existing policies and initiatives taking place across the Danube Region.

Priority Area 2 of EUSDR is focusing on the encouragement of more sustainable energy in line with the EU's integrated climate and energy policies which particularly emphasize the increasing spread of renewable energy sources, and by this, the restructuring of the existing energy systems in order to reduce the emission of CO2 and achieve the Paris Agreement targets. One of the most critical points in the spread of renewable energy sources is how to store surplus energy, therefore energy storage will become a much more important asset in the future energy system. In order to implement energy storage technologies into the energy system successfully, all available methods and already existing energy infrastructures should be considered.

The importance of energy storage in future carbon-neutral and environmentally friendly energy systems is well acknowledged all over Europe. The related research and technological development is already well advanced in some European countries (e.g. Germany, France, The Netherlands, Austria), however it is still in its infancy in Central and Eastern Europe. Therefore, the main objective of the workshop is to provide the participants a state-of-art of subsurface energy storage from the widest range of perspectives (science and technology, industry, economy, policy) and provide them a possibility to discuss these issues with lead European experts.