1st SMARTENERGY WEBINAR

Construction, operation and benefits of geothermal energy

Date: 30 July,2021 | 9:00 - 13:00

This event will focus on the state of geothermal technology, the possibilities and challenges that currently exist, and recent drivers surrounding geothermal energy

Organized by ARCHENERG cluster in collaboration with the SMARTENERGY project partners

ON-LINE event.

*The event is open to any organization that would like to know more about geothermal energy. Participation is **FREE**, but **registration is required**.*

***Register** HERE*

Access link available after registration.

Programme:

TIME	SPEAKER/ORGANIZATION	TOPIC
9:00-9:10	Tony Keys and Agnes Gonda, Archenerg Cluster	Welcome speech from Archenerg, Introduction of the cluster and the SMARTENERGY project
9:10-9:30	Szekszárdi Adrienn v. Gáti Mátyás, MS Solution Ltd.	Closed loop geothermal heat recovery systems in deep dryholes
9:30-9:50	Piszker Szilvia, Geort Ltd.	Ground source heat pump systems
9:50-10:10	Dr. Király Ödön, Cluster of Applied Earth Sciences	European Cooperation under metacluster Geo-Energy Europe
10:10-10:45	Dr. Fedor Ferenc (CEO, Geochem Ltd.)	Labwork in geothermal - and many other - fields
10:45-11:00	O&A and Upcoming webinars	
11:00-11:10	Break	
11:10- 13:00	Matchmarking event / B2B meetings	

What is geothermal energy?

Geothermal literally means Earth's heat, which is estimated to be 5,500 degrees centigrade at the Earth's core – about as hot as the surface of the sun. Geothermal energy is a clean, renewable resource that can be tapped by many countries around the world located in geologically favourable places. Geothermal energy can be harnessed from underground reservoirs, containing hot rocks saturated with water and/or steam.

Boreholes of typically two kilometers depth or more are drilled into the reservoirs. The hot water and steam are then piped up to a geothermal power plant, where they are used to drive electric generators to create power for businesses and homes.

Addressing climate change—particularly at reasonable cost—will require advancements in a range of energy-related technologies.

This webinar focused on the uses of geothermal energy/enhanced geothermal systems in both direct heating and low-carbon electricity generation.

Geothermal energy is considered a renewable resource because it exploits the Earth's interior heat, which is considered abundant, and water, once used and cooled, is then piped back to the reservoir.

Speakers:

- *MS Solution Ltd.*

Main areas of activity: licensing, geological data collection, database creation and interpretation of existing information, analysis of rock and borehole samples obtained during mining activities.

- *Geort Ltd.*

Geort Ltd. provides professional support to designers, contractors and investments to implement geothermal purposes. Organization deals with the design of a probe field for heating and cooling systems with a geothermal heat pump and with the mining capacity permit for the related geothermal wells.

- *Cluster of Applied Earth Sciences*

The Cluster of Applied Earth Sciences is a hub in Central Europe for high tech companies and earth science laboratories offering state of the art services and solutions in:

- ✓ Mining, raw material, hydrocarbon exploration,
- ✓ Geothermal research,
- ✓ Research activity related to radwaste disposal projects,
- ✓ Environmental management,
- ✓ R&D&I projects.

- *Geochem Ltd.*

Geochem Ltd. (Geochem Geological and Environmental Research, Consulting and Service Ltd.) is a high-tech company with a laboratory determining the physical parameters of various materials, special knowledge and ideas, significant own innovation content and high development potential. The main activity is research and development, which is mainly aimed at the complex testing of very compact and unconsolidated materials, as well as the development of special testing equipment and devices. The partners in these developments are major research institutes, universities, small businesses with special knowledge in Hungary and companies interested in radioactive waste disposal projects.