

## ***“Possibilities and limitations of geothermal energy use for heating and production of electricity at volcanic islands”***

### **Detailed program**

1<sup>st</sup> of October 2020, 9:30 – 14:30 pm (CEST, Vienna – Berlin- Paris), **digital event**

**Access link to the digital workshop:**

<https://geologicalsurveyofaustria.my.webex.com/geologicalsurveyofaustria.my/j.php?MTID=m4f54050f42a4a4deaffdfb0ca7346f2f>

### **Detailed program**

9:15	<i>Opening of the web room, digital coffee</i>
9:30	<b>Opening of the workshop and welcome address by Gregor Goetzl</b> , chair of the COST Action CA18219 Geothermal-DHC
9:45	<b>Welcome address and keynote by Attila Kujbus</b> , European Geothermal Energy Council: “Geothermal energy use on (volcanic) European Islands from a market and policy point of view”
10:00	<b>Keynote presentations</b> (20 minutes speaking time and 5 minutes Q&A) <ul style="list-style-type: none"> <li>• <b>Bernard Sanjuan (BRGM, France)</b>: “Development of high-temperature geothermal energy in the French West Indies”</li> <li>• <b>José Martins Carvalho (TARH, Portugal)</b>: “40 years of geothermal activity in the Azores, achievements and challenges”</li> </ul>
10:50	<i>Short coffee break</i>
11:00	<b>Keynote presentations, part 2</b> (20 minutes speaking time and 5 minutes Q&A) <ul style="list-style-type: none"> <li>• <b>Celestino García de la Noceda Márquez</b>: “Geothermal resources in the Canary Islands: potential and constraints”</li> <li>• <b>Evangelos Spyridonos (Greece)</b>: “PPCR S.A. planning for the development of the high temperature geothermal potential of the Aegean volcanic arc islands.”</li> <li>• <b>Juliet Newson (Iceland)</b>: “Learning from successful geothermal energy utilization in Iceland”</li> </ul>
12:15	<i>Lunch break</i>
13:00	<b>Short presentations</b> (15 minutes speaking time and 5 minutes Q&A) <ul style="list-style-type: none"> <li>• <b>Jessica Chicco</b>: “The Salinelle of Mt.Etna” Geosite: thermo-physical and geochemical monitoring of hydrothermal fluids, aimed at understanding both their geothermal potential and their possible correlations with Mt. Etna activity”</li> <li>• <b>Per Gwalter, Iain Pittman, Gary Williams</b>: “De-risking and Enabling Geothermal Energy Developments”</li> <li>• <b>Isabel Fernandez</b>: “CROWD THERMAL project”</li> </ul> <b>Interactive workshop – plenary discussion</b> <ul style="list-style-type: none"> <li>○ What are the main techno-economic barriers for the development of geothermal energy in volcanic islands?</li> <li>○ Are there non techno-economic barriers like social acceptance and risks, which need to be considered for applying geothermal energy on volcanic islands?</li> <li>○ How can these barriers be removed and which technological concepts may allow including geothermal energy in energy supply?</li> </ul>
14:30	<i>End of the workshop</i>

## About geothermal energy use on volcanic islands

Due to unique landscapes, volcanic islands like the Canary, Azores, Aeolian or in the Aegean Sea are very attractive for tourists, which in turn put stress on the islands' energy supply. In the context of climate change mitigation as well as for economic reasons, measures need to be taken to substitute the import of fossil fuels for energy production by on-site resources, which are able to provide base load supply. Active or post-active volcanic islands offer elevated geothermal heat flux, which could be used for combined heat and power production at base load level. However, especially in arid or semi-arid volcanic islands, major constraints for using geothermal energy are given by lack of groundwater, which acts as a heat carrier fluid.

## About the workshop

The workshops, organized by the **COST Action CA18219 "Research network for including geothermal technologies into decarbonized heating and cooling grids – Geothermal-DHC"** in cooperation with the **European Geothermal Energy Council (EGEC)** will focus on the inclusion of geothermal energy in small volcanic islands used for tourism in Europe and abroad.

The workshop focuses on options and limitations of geothermal energy use in volcanic islands for base load heat and electricity supply by CHP facilities. The workshop aims at exchanging experiences linked to the exploration, evaluation and application of geothermal energy in volcanic environments. The interactive part of the workshop focuses on future options and limitations of applying geothermal energy on islands.

The documentation and materials linked to workshop can be downloaded [here](#).

## Conveners of the workshop

Vasiliki GEMENI	<i>CERTH (Greece)</i>	Gregor GOETZL	<i>GBA (Austria)</i>
Emilio L. PUEYO MORER	<i>IGME (Spain)</i>	Giuseppe MANDRONE	<i>UNITO (Italy)</i>
Mónica SOUSA	<i>APG (Portugal)</i>	Bernard SANJUAN	<i>BRGM (France)</i>
Attila Kujbus	<i>EGEC (Belgium)</i>		

## About Geothermal-DHC

The COST Action CA18219 Geothermal-DHC addresses the inclusion of geothermal energy in decarbonized heating and cooling grids across Europe. The network follows a technologically bottom-up approach involving the whole spectrum of geothermal and envisaging the whole process chain from planning to operation and monitoring. Our network addresses both, refitted existing heating and cooling networks as well as new grids. Geothermal may act as a heating source, sink or storage and may be combined with other renewables or waste heat in multivalent heating and cooling grids. Geothermal-DHC aims to demonstrate that geothermal energy has the potential to significantly **enhance the share of renewable energy sources in heating and cooling grids to 30% in 2030 and 50% in 2050** in Europe.

Geothermal-DHC connects researchers from various disciplines (e.g. geosciences, energy conversion and social science) with stakeholders (e.g. energy suppliers, municipalities and energy planners), who are interested to lower the CO<sub>2</sub> footprint of heating and cooling in their region. Currently, the network is covering participants from more than 30 European countries as well as observers from outside of Europe.

For more information on Geothermal-DHC please visit [www.geothermal-dhc.eu](http://www.geothermal-dhc.eu).