

Renewable energies: a major societal challenge

The integration of renewable resources in our energy consumption plans has gained an increased interest over the past decade and is nowadays becoming a major societal challenge. The perspective of a climate change triggered decisional instances at European level to launch major investments plans dedicated to seek low carbon energy sources. These low carbon sources include, among others, wind power, hydroelectric, photovoltaic and geothermal. This last resource, exploiting the thermal energy of the earth for heating or electrical power production, remains largely underrepresented in spite of a virtually infinite potential.

The horizon 2020 program in a few words

The Horizon 2020 R&D program represents a total of around 80 billion Euros and a pillar of this program is dedicated to societal challenges. Among these challenges, the Secure, Clean and Efficient Energy challenge is a work part of major interest split into three focus areas: Energy Efficiency, Low Carbon Technologies, Smart Cities & Communities.

(<https://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>)

Dr. Ghislain Trullenque, structural geologist at UniLaSalle, Beauvais campus (France), GEOS department, B2R research team.



Ghislain is the scientific coordinator of the MEET project, is responsible of field campaigns on fractu-red granitic reservoir analogues and leader of the workpackage communication, dissemination and exploitation.

Key numbers

16 Partners

5 Countries

€11.73M total budget **€9.97M**

funded by EC

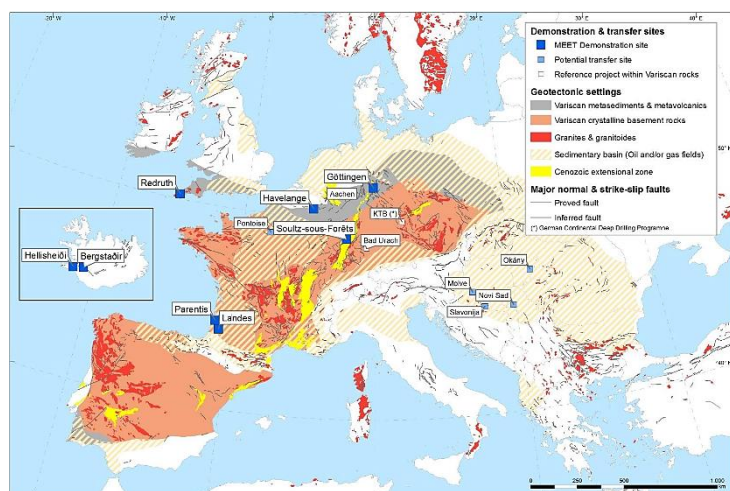
42 Months

May 2018 - Oct. 2021

The **MEET project** (Multidisciplinary and multi-context demonstration of Enhanced Geothermal Systems exploration and Exploitation Techniques and potential) is part of this whole work program and aims to investigate the topic: Enhanced Geothermal System (EGS) in different geological conditions.

MEET presents three major objectives:

- Gather knowledge of **EGS heat and power production in various geological settings**, open present infrastructures to promote education and training of future technology users, attract and convince future investors and raise public awareness to boost EGS societal acceptance.
- Increase electricity and heat production from **geothermal plants and existing oil wells**, reduce the cost of energy and de-risk further development of EGS plants.
- Promote the penetration of small-scale EGS power and/or heat plant by **mapping the most promising sites** where future capacities should be installed.



The MEET project aims at developing geo-thermal energy in various geological settings. MEET emphasizes on Research and Development activities combined with demonstration facilities. Potential transfer sites are taken into consideration in order to broaden the area of investigations at the scale of the European territory.



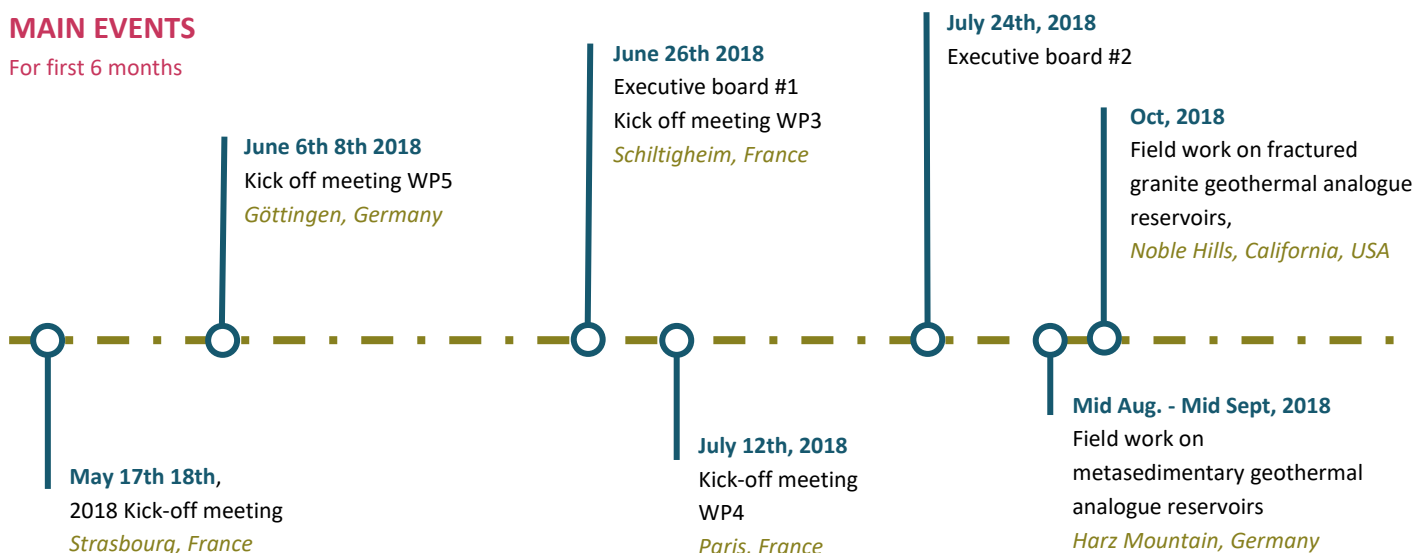
This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No. 792037

MEET is divided into 8 Topics (so called Work Packages)

WP1: Ethics and Security, **WP2:** Project Management, **WP3:** Upscaling of thermal power production and optimized operation of EGS plants, **WP4:** Enhancing petroleum sedimentary basins for geothermal electricity and thermal power production, **WP5:** Variscan geothermal reservoirs (granitic and metamorphic rocks), **WP6:** Demonstration of electricity and thermal power generation, **WP7:** Economic and environmental assessment for EGS integration into energy systems and **WP8:** Communication, dissemination and exploitation.

MAIN EVENTS

For first 6 months



Current activities

WP1: On-going risk assessments for field operations.

WP2 & WP8: Web-site now available @ www.meet-h2020.com.

WP3: Planification of optic fiber installation a in observation well and design of a specific heat-exchanger for scaling and corrosion studies.

WP4: Choice of tests sites within the Vermilion operating oil fields.

Co-produced fluid analysis on Vermilion boreholes within the basin of Paris. Review of borehole geological record and casing corrosion related data.

WP5: Preparation of future field campaigns within metasedimentary and fractured granite geothermal reservoir.

WP6: Design of heat exchangers and ORC units for Electricity production using geothermal fluids.

WP7: Identification, characterization and analysis of influencing factors on EGS development. Deep analysis of multicriteria decision making approachest.

SAVE THE DATES!

MEET will be present at following events:

- September 20th 2018 ANR PREGO, *Nantes, France*
- October 14 - 17th 2018 GRC, *Reno, Nevada*
- November 12 - 15th 2018 MEDPOWER, *Dubrovnik, Croatia*
- November 27 - 29th 2018 Geothermiekongress, *Essen, Germany*
- June 11 - 14th 2019 EGC, *The Hague, The Netherlands*

