



## OUR NETWORKS

Renewable energies

Geothermal energy



### GEOTHERMAL ENERGY

## OUR NETWORKS

### COLLABORATION WITH THE BRGM

« We work in close partnership with teams from the **BRGM** (French Geological and Mining Research Bureau), capitalizing on our synergies and complementary expertise: we contribute to the resolution of **operational problems** covering the entire value chain; for its part, the BRGM is positioned more on issues relating to basic research. Over the years, we have also come together for collaborative projects, both French and European, particularly relating to **CO<sub>2</sub> storage**. »

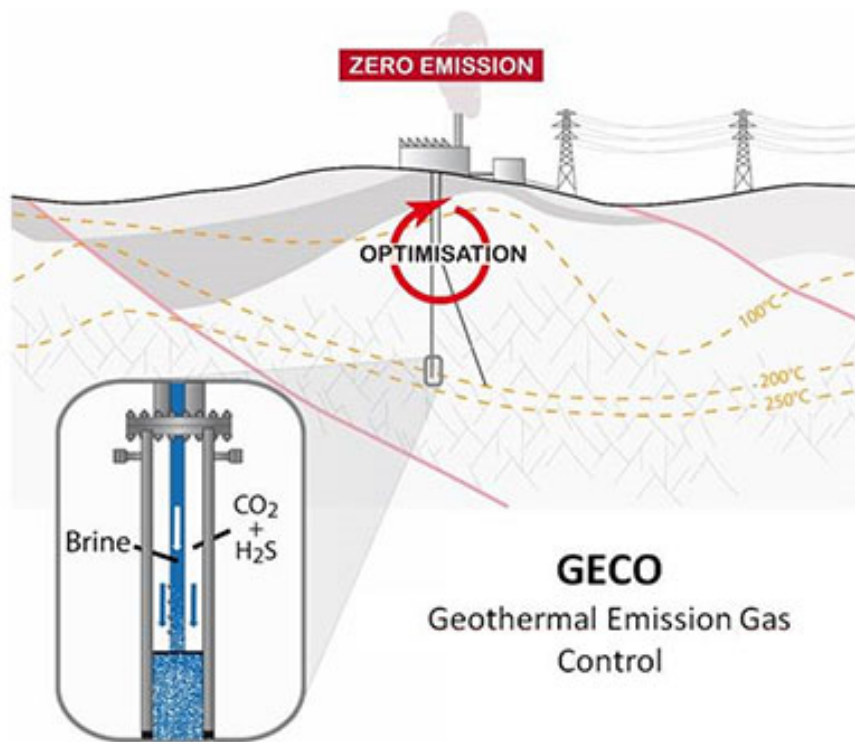
**Florence Delprat-Jannaud, Program Manager at the Energy Resources business unit, IFPEN**

### THE EUROPEAN GECO PROJECT

With a view to reducing the gas emissions from geothermal power plants, Europe is funding a

collaborative project within the framework of its [Horizon 2020](#) program.

« The purpose of the European GECO project (Geothermal Emission Control) is to develop innovative technologies designed to considerably reduce greenhouse gas emissions from **geothermal power plants**.



The GECO project involves a pilot unit operated by [Reykjavik Energy](#). We are participating in the project alongside 16 industrial and academic partners to develop different approaches, which will be tested at four pilot plants in Europe. We bring our expertise in several fields to the project:

- hydrodynamic and thermal modeling of production and injection wells, definition of the optimal conditions for the **combined injection of water and non-condensable gases**,
- integration of **simulation models** in a monitoring tool.

**Christine Souque, Geothermal Energy project manager, IFPEN**

## COLLABORATION WITH STORENGY



The partnership agreement with [Storengy](#) is hinged around our shared determination to transfer expertise acquired from the exploitation of oil and gas to new energies, in order to contribute to the growth of new industrial sectors for the energy transition. Geothermal energy is one of the fields covered by the framework agreement, along with:

- energy storage,
- hydrogen,
- and digital tools.

This collaboration with Storengy on issues relating to storage and geothermal energy enables us to remain in tune with market needs.

**Emmanuel Manceau, Director Business and Partnerships – Carnot IFPEN-RE**

## AVENIA COMPETITIVENESS CLUSTER



Created in 2006, the [Avenia](#) competitiveness cluster's aim is to

ensure the long-term use of the underground environment in the energy transition. It supports research projects making it possible to:

- develop long-term technologies for geosciences,
- foster the transfer of technologies to three markets:
  - upstream oil and gas,
  - deep geothermal energy,
  - underground storage ([energy](#) and [CO<sub>2</sub>](#)).

« Thanks to our expertise in geosciences, we have been contributing to the Avenia competitiveness cluster since its creation:

- to use renewable energies with a low environmental impact (geological CO<sub>2</sub> storage, geothermal energy),
- to ensure the prudent and environmentally-friendly exploitation of fossil energies (energy efficiency, produced water management, etc.),
- to support the transfer of Oil&Gas expertise to geothermal sector players. »

*Vincent Richard, Program Manager at the Energy Resources Business Unit, IFPEN*

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## CONTACT



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