PILOTE CO_2-DISSOLVED

Research topic

Underground storage of dissolved CO_2 in a deep saline aquifer coupled with geothermal energy recovery

Case study

To be identified in France or in Europe

Leader* and consortium

Geogreen*, BRGM, CFG Services, Enertime, IRENEE (Univ. de Lorraine), LEO (Univ. d'Orléans), GeoRessources (Univ. de Lorraine), PASSAGES (Univ. de Pau et des Pays de l'Adour), Partnering in Innovation, Inc. (USA)

Budget

2.3 M€

Funding

782 503 €

Timescale

06/2016-11/2017

Contacts

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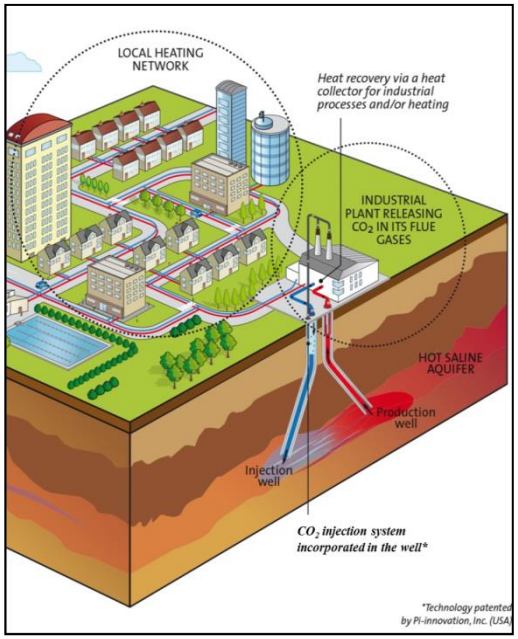
MAIN OBJECTIVE

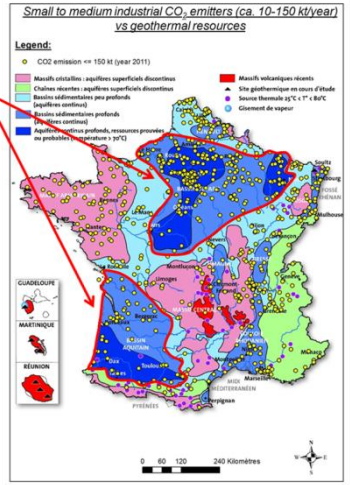
Identify an industrial site and bring onboard the industrial partner in order to size a first demonstration pilot that aims to capture, inject and store locally the emitted CO_2 after being dissolved in brine extracted from a geothermal doublet.

A POTENTIAL MARKET FOR SMALL INDUSTRIAL EMITTERS (< 150 000 t/a)

A matching of geothermal resources and the location of small industrial emitters (yellow spots in the map below) has demonstrated where the potential of applying the CO_2-DISSOLVED concept lies, particularly in France. The pilot site is now being sought among the identified compatible CO_2 emitters.



More than 350 compatible emitters identified in the Paris basin and in the Aquitaine basin



Compatible emitters (2011 data) :
- **653** small emitters
- Emitting **25 Mt CO_2/a**
- Equivalent to **17%** of the French industrial emissions