



Fonroche Géothermie : Finance for innovation

ETS Fund – WorkShop April 6th 2017

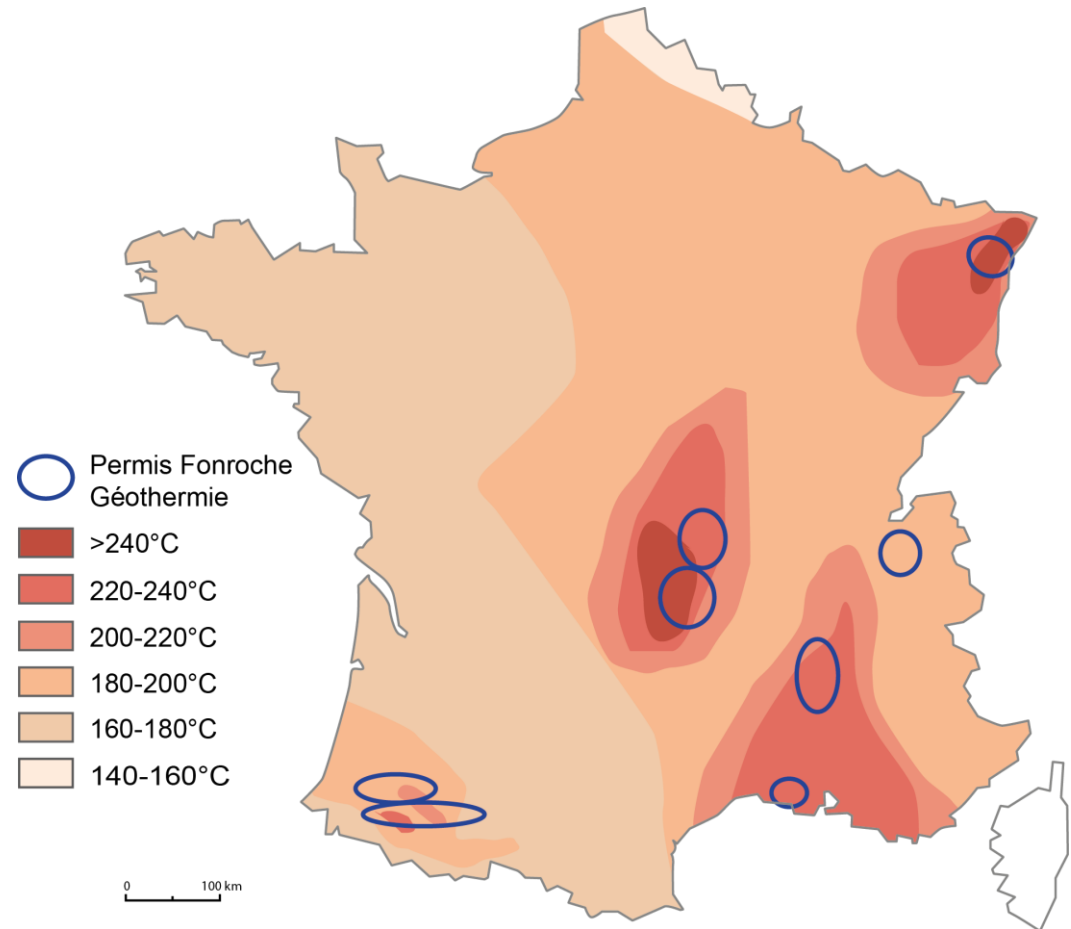


In France

5 big regions:

- Le Bassin Aquitain
- L'Alsace
- Le Bassin de Genève
- Le Massif Central
- Le Bassin du Sud-Est

Geothermal is the 3rd renewable energy in France for Heat & Cold production.



Carte de France des températures à – 5000 m de profondeur en France Métropolitaine

A French Actor on Geothermal Development involved in several R&D projects

✓ FONGEOSEC

- ✓ PIA program
- ✓ Collaborative projects
- ✓ 10 partners

✓ DEEPEGS

- ✓ Horizon 2020 program
- ✓ 10 partners from 5 countries

✓ GEODENERGIES (Scientific Association)

- ✓ National Research Agency funded
 - ✓ 3 projects started
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✓ Focused on drilling phase

- ☐ Different tool bit to be implemented
 - DT Hammer-Water hammer (pressure loss)
 - Electromagnetic Hammer (bobbin percussion)
- ☐ Development of geothermal doublet (semi open loop)

✓ Focused on reservoir production increasement

- ☐ Use of multi-drain technology
- ☐ Knowledge of geothermal water circulation by tracers

✓ Focused on exploration phase

- ☐ Micro-seismic studies
- ☐ Global reservoir characterization
- ☐ New soft stimulation methods
- ☐ Work on high thermal tools (*in situ* sampling)

✓ Focused on valorization tool

- ☐ Development of ORC in parallel for increasing available time of production
- ☐ Work for increasing fluids work on ORC and production rates