



GEOSTRAS

NER 300

The project

Technology category: Geothermal energy
Location: Vendenheim, Alsace, France
Max. NER 300 funding: EUR 16.8 million
Final investment decision: June 2018 (estimated)
Entry into operation: June 2020

State of advancement

Applications for drilling licenses were issued by public authorities in 2016. The geological and energy valorisation studies have started. Geophones for seismic survey have been implemented and civil engineering has started.

Outlook for coming year

The project expects to start drilling operations during the coming year.

Outlook for coming 5 years

Several main innovations (drilling architecture, down-the-hole hammer, thermodynamic cycle) will be developed until November 2020. Putting into service should be effective in 2020.

Project sponsor

SAS GEOVEN

Project summary

GEOSTRAS aims to develop a project for producing renewable energy thanks to geothermal power. Electric and thermal energy will come from a high temperature geothermal resource (over 150 °C) and will be harnessed thanks to a thermodynamic cycle.

GEOSTRAS will develop a deep underground exchanger in Alsace with low natural permeability. A geothermal plant will be built to jointly produce electricity, heat and/or cold with the following characteristics:

- 241 000 MWh for electric production;
- 810 000 MWh for thermal production.

This geothermal exchanger is highly innovative, increasing chance of succeeding by opening two different ways of production: direct flow through long drain or conductive/convective geothermal heating on a forced flow inside the well.

GEOSTRAS project will concern deep naturally fractured geothermal system that is Enhanced Geothermal Systems (EGS), which aims to capture geothermal fluids present in naturally fractured reservoirs.