

**Project Acronym :** EGS PILOT PLANT

**Project Title :** European geothermal project for the construction of a scientific pilot plan based on an Enhanced Geothermal System

**Coordinator :** Groupement Européen d'Interet Economique "Exploitation Minière de la Chaleur (France)

**Website :** <http://www.soultz.net/>

## ABSTRACT

The EGS Pilot Plant project is a FP6 European co-funded project (n°SES6-CT-2003-502 706) ending by March 2009. The general objective is the construction of a geothermal pilot plant for producing electricity, based on multi-well Enhanced Geothermal Systems (EGS). A multinational approach has been set up for developing an EGS reservoir which is a promising way for the production of geothermal heat and power. The pilot site is located at the French-German border in Soultz-sous-Forêts. Over two decades research and development have been carried out with governmental and European funding, as well as with France and Germany. The deep wells system today consists of three wells with more than 5000 m depth each. Stimulation and circulation tests with three wells have been completed successfully from 2000 to 2005 and hydraulic performance has been improved in the year 2006. In order to reach the target, which is producing electricity from deep fractured rocks in a non volcanic area, two main series of objectives were defined for the pilot plant.

Technological objectives:

- Select then implement an optimised production pumping equipment and an appropriate power cycle.
- Certify the selected technologies.

Scientific objectives:

- Improve the hydraulic performances of the three existing deep wells and investigate both the interwells and the wells to the geothermal reservoir connections.
- Investigate, quantify and analyse the risks for installations, environment, exploitation, in order to define diagnostic, prevention and risk management policies.
- Elaborate guidelines for future EGS plants in "Soultz like" conditions.

Project organisation:

The project involves 9 organisations (France, Germany, Norway, Switzerland) among which the GEIE "Exploitation Minière de la Chaleur" assumes the role of coordinator. This project is the continuation (Phase II) of a programme already engaged during the period 2001 - 2005 (Phase I). Industrials partners of the Soultz consortium today are EDF, Electricité de Strasbourg, EnBW Energie Baden-Württemberg AG, Pfalzwerke AG and Evonik AG associated within an EEIG (European Economic Interest Grouping). A geothermal power plant has been built, is connected to the French grid and is currently within a testing phase.

## PARTNERS

Géothermie Soultz – **France**; Mesy Geo Mess Systeme – **Germany**; Institut für Geowissenschaftliche Gemeinschaftsaufgaben – **Norway**; Bundesanstalt für Geowissenschaften und Rohstoffe – **Germany**; Centre National de la Recherche Scientifique – **France**; Deep Heat Mining Association – **Switzerland**; Bureau de Recherche Géologiques et Minières – **France**; Institut for Energiteknikk – **Norway**; GTC Kappelmeyer – **Germany**.