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The GEOFAR Project - Geothermal Finance and Awareness in Europeans Regions - Development of new schemes to overcome non-technical barriers, focusing particularly on financial barriers

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Numerous advantages of geothermal energy like its widespread distribution, a base-load power and availability higher than 90%, a small footprint and low carbon emissions, and the growing concerns about climate changes strongly promote the development of geothermal projects.
Geothermal energy as a local energy source implies needs on surface to be located close to the geothermal resource. Many European regions dispose of a good geothermal potential but it is mostly not sufficiently developed due to non-technical barriers occurring at the very early stages of the project.
The GEOFAR Project carried out within the framework of EU's "Intelligent Energy Europe" (IEE) program, gathers a consortium of European partners from Germany, France, Greece, Spain and Portugal. Launched in September 2008, the aim of this research project is to analyze the mentioned non-technical barriers, focusing most particularly on economic and financial aspects. Based on this analysis GEOFAR aims at developing new financial and administrative schemes to overcome the main financial barriers for deep geothermal projects (for electricity and direct use, without heat pumps).

The analysis of the current situation and the future development of geothermal energy in GEOFAR target countries (Germany, France, Greece, Spain, Portugal, Slovakia, Bulgaria and Hungary) was necessary to understand and expose the diverging status of the geothermal sector and the more and less complicated situation for geothermal projects in different Europeans Regions. A deeper analysis of 40 cases studies (operating, planned and failed projects) of deep geothermal projects also contributed to this detailed view. An exhaustive analysis and description of financial mechanisms already existing in different European countries and at European level to support investors completed the research on non-technical barriers.

Based on this profound analysis, the GEOFAR project has made an overview of the difficulties met by project planners, developers and politicians when developing a new geothermal project. Each of the analyzed countries is facing a distinct bundle of non-technical barriers. Globally, deep geothermal projects are characterized by high up-front costs and are facing the geological risk of the non discovery of the resources in adequacy to the initial expectations. Moreover, investors are facing directly the competitiveness of fossils energy. The very long pay back period makes it also difficult for them to face the geological risk.
GEOFAR will propose new targeting financing and funding schemes, in order to remove the financial barriers hindering the initial stages of geothermal energy projects.

GEOFAR also considers a lack of awareness as important barrier hindering the future development of geothermal energy projects. Public opinion is globally positive to geothermal energy, but deep geothermal projects are often suffering from a lack of information leading sometimes to non public acceptance. By underlining the range of possibilities offered by the geothermal energy and the potential and emerging technologies, GEOFAR tends to increase the awareness of geothermal energy in order to boost the development and the investment in new geothermal energy projects. Geothermal energy is expected to contribute significantly to the future European energy sources and the GEOFAR project aims to facilitate it.