PIXIL, an innovative project to promote geothermal energy in Spain and France

Barcelona, August 26, 2020. The European Union, through the Interreg VA Program, seeks to promote innovation and competitiveness in the cross-border area between Spain and France. The project PIXIL is giving a boost to geothermal energy, thus providing a valuable opportunity for the region to move towards the energy transition.

From the project, PIXIL (Pyrenees Imaging eXperience: an InternationaL network) is promoted the development of geothermal energy throughout the trans-Pyrenean territory. Geothermal energy is a natural source of energy, with a reduced environmental impact and free of CO2 emissions. This energy resource uses a constant flow of thermal energy that goes from the subsoil to the surface to, on small scales, reduce costs associated with heating/air conditioning of homes or installations of all kinds or, in larger projects, to produce electrical energy. Geothermal works 24 hours a day and therefore provides excellent support for other renewable energy sources that present greater variability, such as photovoltaic or wind. Besides, it is an energy of purely local origin, both due to its use close to the place of obtaining it and due to its null dependence on technologies or materials foreign.

The project PIXIL proposes to create a cross-border R&D network focused on the development of prospecting technology geophysical or *imaging* of the subsoil, that improves the sectorial competitiveness of the area, values local resources and strengthens professional skills at a transnational level, with significant benefits for the population of the region. Scientific and technological efforts are focused on improving the characterization of the

subsoil through geophysical techniques. As the *imaging* has had in the past a strong impact in the fields of mining and hydrocarbons, this project aims to bring this technology to geothermal energy. The local population can benefit, through the exploitation of geothermal energy, from a favorable return on investment in the medium or long term and clean and renewable energy.

In PIXIL participate and collaborate professionals belonging to important technological development and research centers such as the Barcelona Supercomputing Center (BSC), the Basque Center for Applied Mathematics (BCAM), the University of Barcelona (UB), on the Spanish side, and RealTimeSeismic (RTS), the Institut national de recherche en sciences et technologies du numérique (Inria) and Pole AVENIA, on the French side. In addition to these institutions, in the project PIXIL a large group of collaborators participates who represent the business fabric of the area, whose mission is to evaluate the results or achievements, guide new developments and, in the future, apply technological advances as part of their portfolio of services and thus improve the competitiveness of the sector.

This innovative project, led by researcher Josep de la Puente, is coordinated by the Barcelona Supercomputing Center (BSC). Central to the project is the idea that "a good characterization of the subsoil can be key to having more reliable and economical geothermal projects. From the project, we believe firmly that through simulation and analysis of geophysical data we can give a boost to the geothermal industry At PIXIL, we focus on the region, but we have international ambition, "says de la Puente.

The project has been co-financed 65% by the European Regional Development Fund (ERDF) through the Interreg VA Spain-France-Andorra Program (POCTEFA 2014-2020). The objective of POCTEFA is to reinforce the economic and social integration of the Spain-France-Andorra border area. Its assistance focuses on the development of cross-border economic, social, and environmental activities through joint strategies in favor of sustainable territorial development.

For more information:
Visit the website: https://pixil-project.eu/
Contact: maria.becerro@bsc.es