In the framework of the project « Geothermal village » funded by LEAP-RE program from EU-AU, an engineer or young researcher position is open in the GeoRessources laboratory at Université de Lorraine (France).

Program description

Geothermal is a flexible, full-time energy source, that allows to answer local needs and serve surroundings through energy and water networks. With the objective to introduce stand-alone electric and thermal energy our African-European R&D group aims to provide template case-studies adapting geothermal energy resource and off-grid systems to community needs in Africa : the geothermal village concept proposed by Varet et al (2012). After field studies already engaged, sites with different thermal and socio-economic characteristics will be selected, developing for each a suitable energy plan. We aim to keep the technology level appropriate to local operation, maintenance and even replication, which furthers the long-term objective of capacity building, economic and social welfare, encouraging young educated people to stay on their homeland. These systems can supply fresh water and supplant oil and firewood which, in addition to environmental and health benefits, reduces the domestic expense and workload on women and girls allowing time for education and productivity.

Geothermal village program is funded for three years.

Methodology and work plan

The first step is identifying sites, characterizing them, and arriving at a generic energy-system plan. All these have technical and social elements. The second step is site feasibility and design. The third step, for which additional support is looked for, will be the construction of demonstrator systems for which 3 suitable “Geothermal Village” sites selected from the EARS. With model plans for high-enthalpy (HE) sites in the Eastern Rift and Afar, and medium-enthalpy (ME) site in the W & S Rifts, (Omenda et al. 2016) representing also the variation in societal context, where the requirements of pastoral indigenous, fishing or agricultural communities each imply a different use of the electricity and thermal water.

The teams is composed by researchers and industrial partners from France, Germany, Italy, Norway, Rwanda, Ethiopia, Kenya, Djibouti with expertises about geology, network technology and social impacts.

Job description

In the frame of the project we aim to recrute an engineer or young researcher with expertises in geosciences (geology, geophysics and/or geochemistry) and affinity to social aspects. He/She will be in contact with the different teams and contribute to the project coordination. He/She will contribute to the different field jobs, geological and geophysical prospections, geochemical sampling or social impact studies.
We offer an employment contract of minimum 18 months starting in March-April 2021.

Profile

Applicants should have :

- A PhD degree in science (geology, geophysics, geochemistry), a field expertise will be appreciated.
- Well-developed social skills, a strong motivation to coordinate an interdisciplinary team and to have the will to train staff.
- A strong motivation for research and development of new concepts, scientific presentation and writing skills, and communication
- Very good English language skills

Contact Yves Geraud : yves.geraud@univ-lorraine.fr for more information or send us your CV.

Laboratory Website : https://georessources.univ-lorraine.fr