



## **Exploring attitudes toward social acceptance of the first deep geothermal technology in the UK: a qualitative study**

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The first Deep Geothermal Energy Plant in the UK is being installed at the United Downs Industrial Estate in Cornwall. Alongside other renewable energy sources (e.g., solar, wind), geothermal energy used as power generation has been recognised as an important contributor to future energy demands (Li et al., 2015). This study focused on the social acceptance of this technology. Indeed, lack of acceptance of and public resistance to the technology can hinder the implementation of renewable energy options (e.g., Kunze & Hertel, 2017). Previous studies examining people's perception of geothermal energy technology in other Countries showed a high level of uncertainty, low levels of knowledge and concern toward the technology (e.g., Pellizzone et al., 2017). Therefore, an efficient communication strategy from the actors responsible for the geothermal project is crucial. A central aim of the current study sought to examine people's perception of how and what the actors communicated with them. Based on social identity theories (Fritsche et al., 2017; Tajfel & Turner, 1979; Turner et al., 1987), perceptions are seeing as the result of collectively shared interpretations within the community involved in the geothermal project. Adopting a qualitative approach, four focus groups were carried out to elicit participants' opinions about the technology. This approach provided a deep understanding of locals' feelings, opinions and concerns. Main results showed a general positive evaluation toward the technology. The positive community interpretations were mostly linked to their past long historical tradition of Cornish hard-rock miners. However, perceived unfairness of the decision-making procedures adopted by actors responsible for the project led to a general discontent among locals. Practical recommendations for communication and engagement of locals involved in geothermal energy technology implementation are presented.