

Social acceptance of Deep Geothermal Energy

A global overview

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Introduction

- geothermal projects as a trigger for social resistance in South-East Germany [Kunze 2017; Flechtner 2019]

Aim of the research project

- identify and categorize 'acceptance criteria' (Fig. 1) crucial to assess geothermal projects in various population groups
- strategy to reduce and prevent scientifically unsubstantiated concerns and overall objections against geothermal projects (Fig. 5)

Methods

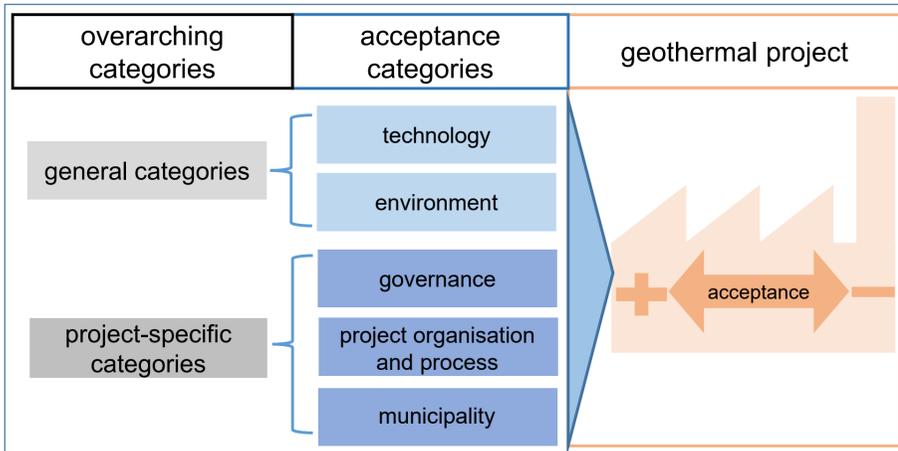


Figure 1: Relation of social acceptance categories to geothermal project (modified graphic based on Leiren et al. 2020).

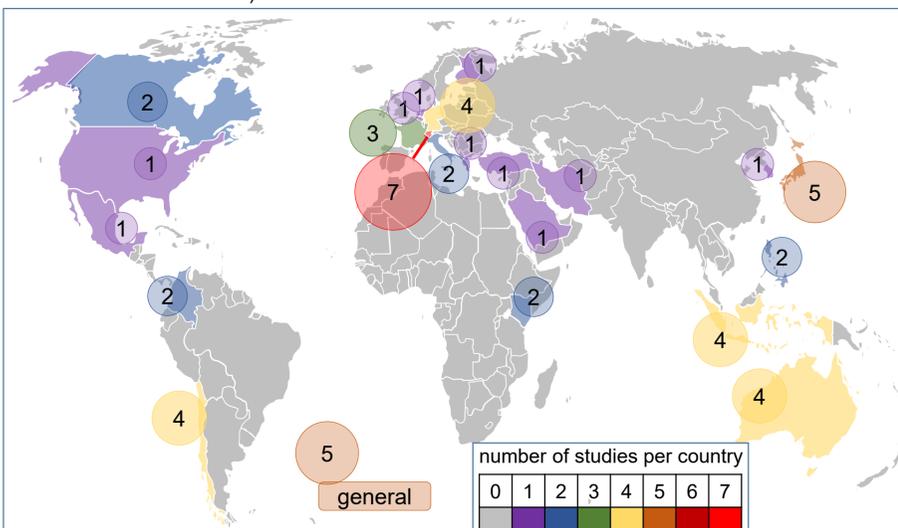


Figure 2: Number of studies examined per country in the global context and insert map of South Germany with geothermal projects.

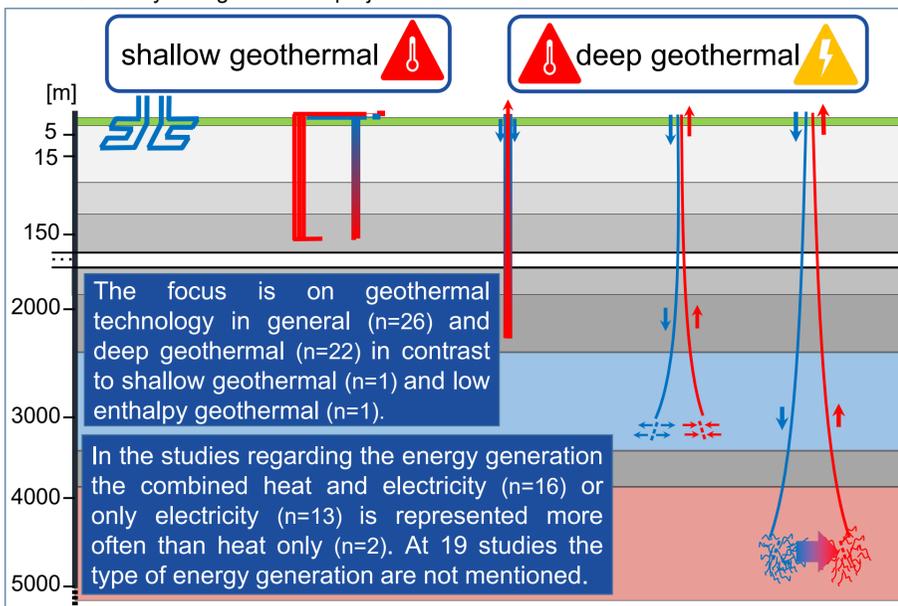


Figure 3: Visualisation of geothermal technologies (own graphic based on Jodocy et al. 2007 in Stober, Bucher 2020).

Results

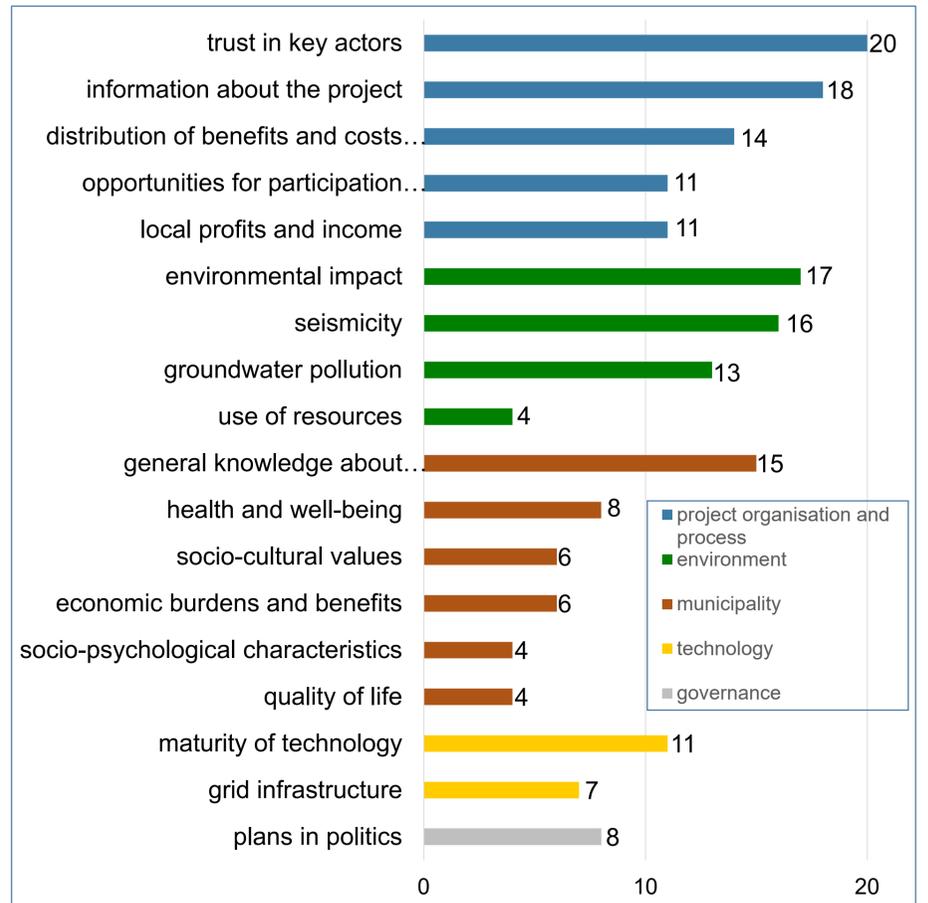


Figure 4: Acceptance factors used in the observed papers more than three times and sorted by acceptance categories.

Discussion and open questions

- increased focus in recent scientific publications indicates growing significance of geothermal-relevant acceptance factors (Fig. 2)
- the evaluation of the geothermal-relevant acceptance factors (Figs. 3 and 4) needs to be comprehensible created and depends on various factors such as: *type of methodology used, sample size, number of sources analysed and the positive or negative impact on acceptance regarding geothermal projects*

Next steps



Figure 5: Overview of the next steps regarding the research project.

References

Flechtner, Ferdinand; Loewer, Markus; Keim, Maximilian (2019): Bürgerentscheid gegen Geothermie - Fallstudie Puchheim.
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