

Sociological considerations on the public acceptance of Deep Geothermal Energy in South-East Germany

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Introduction

- geothermal heat and power projects (GHPP) as a trigger for social resistance in South-East Germany [Kunze 2017; Flechtner 2019]; (Fig. 1)

Aim of the research project

- identify and categorize 'acceptance criteria' (Figs. 2 and 3) crucial to assess GHPP in various population groups
- strategy to reduce and prevent scientifically unsubstantiated concerns and overall objections against GHPP (Fig. 6)

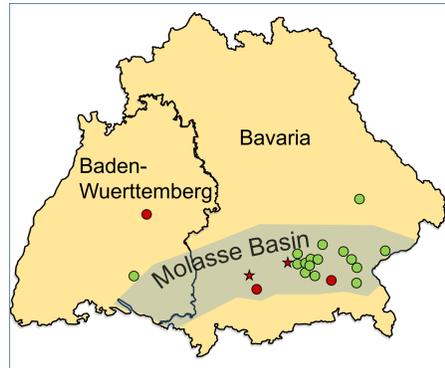


Figure 1: Scheme of realized and cancelled GHPP in South Germany.

Methods

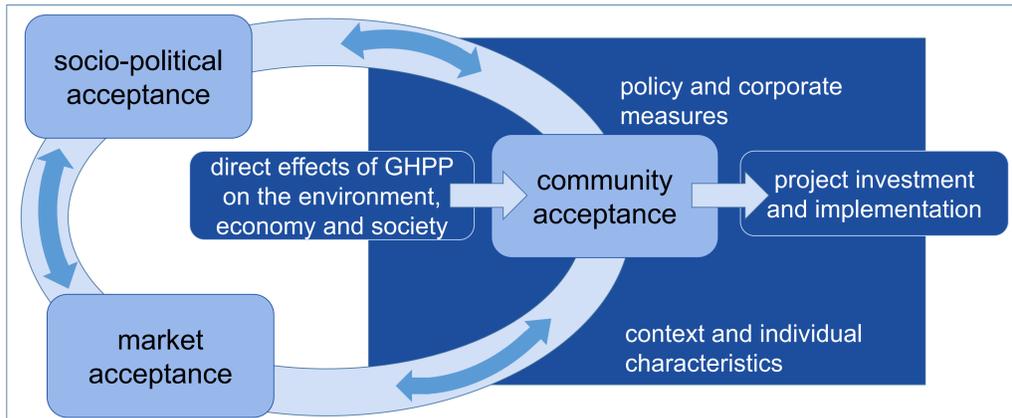


Figure 2: Three types of acceptance according to Wüstenhagen et al. (2007) in a modified model of Leiren et al. (2020) to picture the different aspects of acceptance categories regarding the geothermal topic.

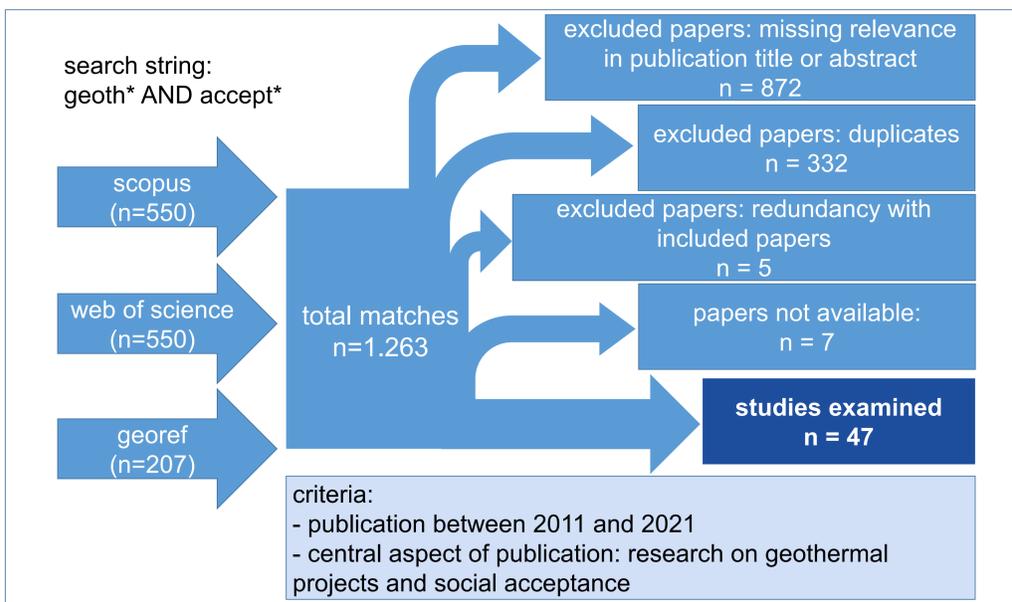


Figure 3: Method for selection of the relevant papers for the literature review.

Global context

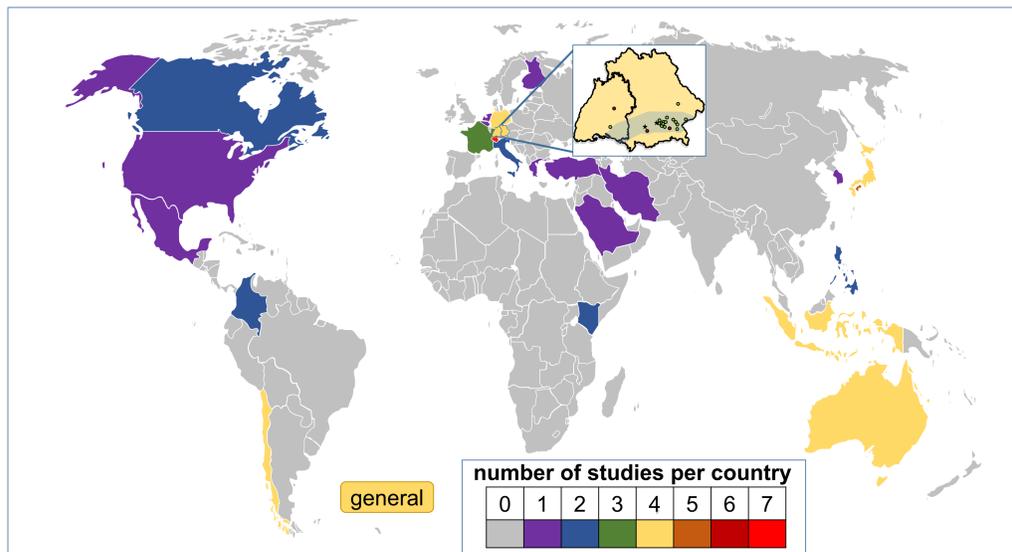


Figure 4: Number of studies examined per country in the global context and insert map of South Germany with GHPP.

Results

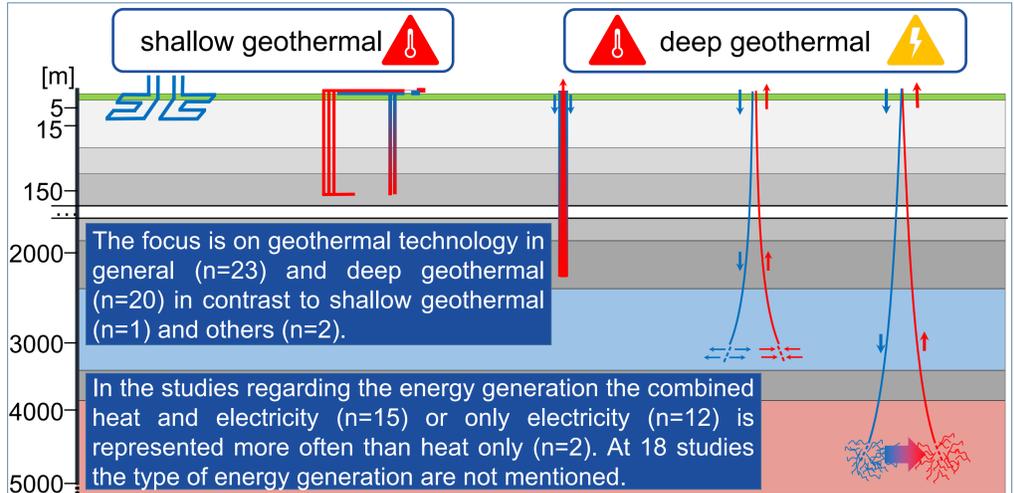


Figure 5: Visualisation of geothermal technologies (own graphic based on Jodocy et al. 2007 in Stober, Bucher 2020).

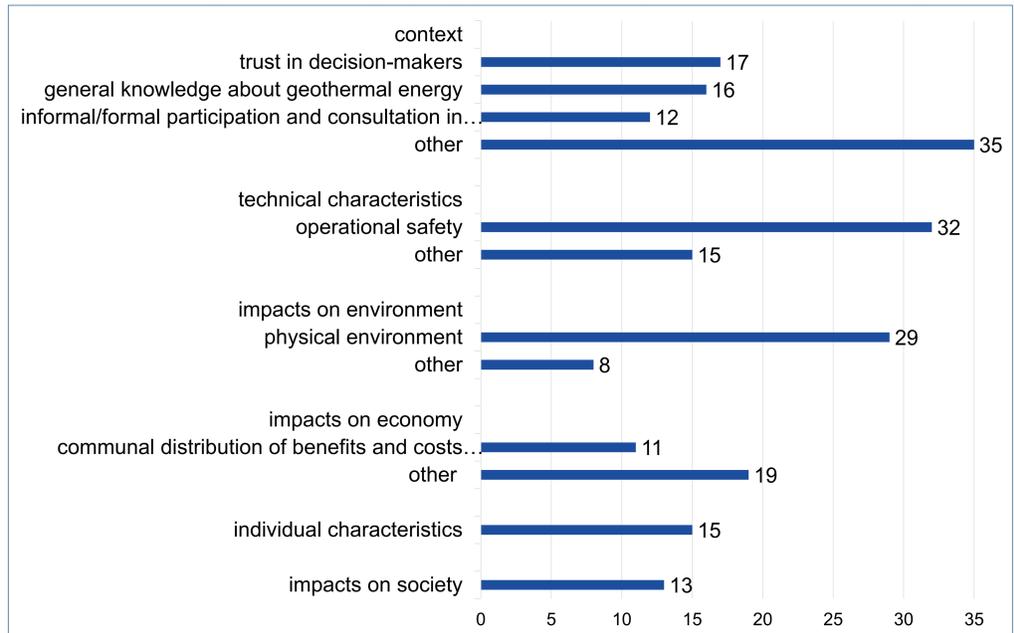


Figure 6: List of acceptance factors used in the observed papers and sorted by acceptance categories. (If mentioned less than ten times, the acceptance factor is summarized in „other“.)

Discussion and open questions

- increased focus in recent scientific publications indicates growing significance of geothermal-relevant acceptance factors (Fig. 4)
- the evaluation of the geothermal-relevant acceptance factors (Figs. 5 and 6) 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 GHPPs

Next Steps

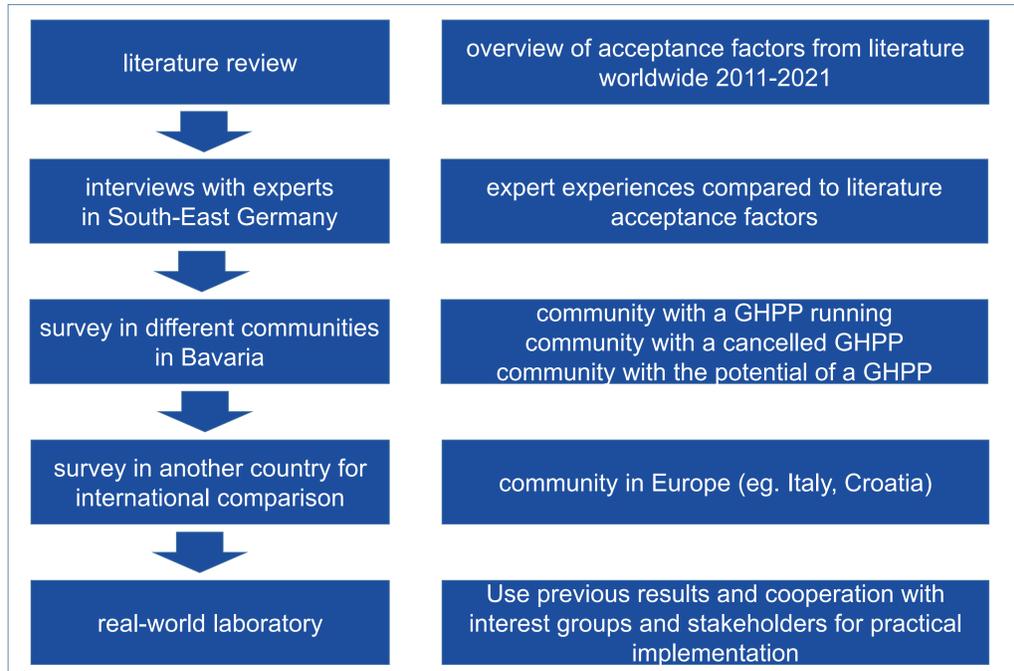


Figure 7: Overview of the next steps regarding the research project.

References

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