



GECKO



Co-design of an implementation concept for a deep geothermal energy project at the Karlsruhe Institute of Technology (KIT)

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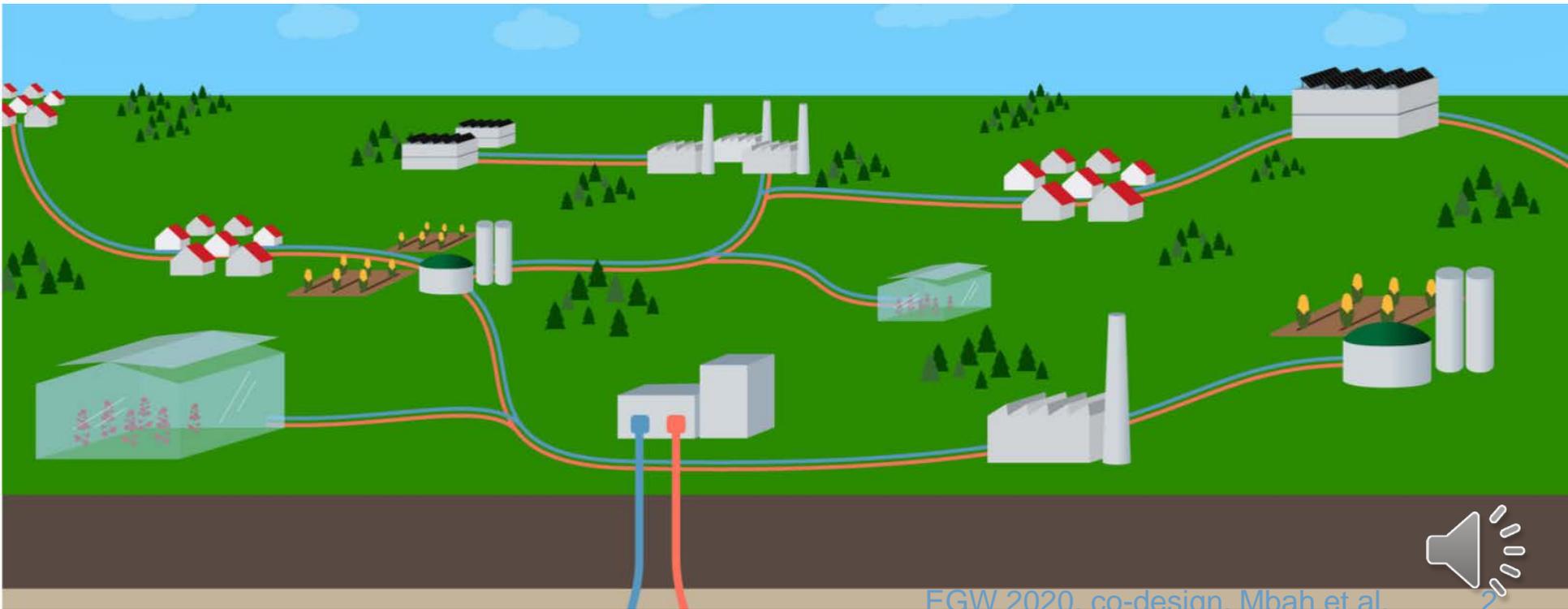
EGW 2020, Session „Social acceptability“

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Background of the project



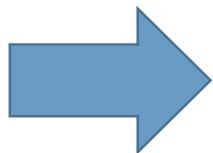
Background I

- German “Energiewende” needs more action towards reduction of CO₂-emissions in heat use (heat production) (nearly 50% of CO₂-emissions)
- Geothermal energy plants may contribute to this transformation process
 - long-term infrastructure project
 - socio-technical implications, e.g. change of overall energy supply system, variety of actors and interests, landscape changes, ...
 - social acceptability is an important aspect



Background II

- Renewable energy plants are often contested infrastructures, despite a broad consensus for the German “Energiewende”
- Stagnation in expansion of renewable energy plants (especially wind power plants and deep geothermal energy plants)
- Many concerns/fears with regard to (deep) geothermal energy plants in many countries (especially regarding seismicity)
- Public participation in geothermal projects has so far mainly remained at the level of hearings

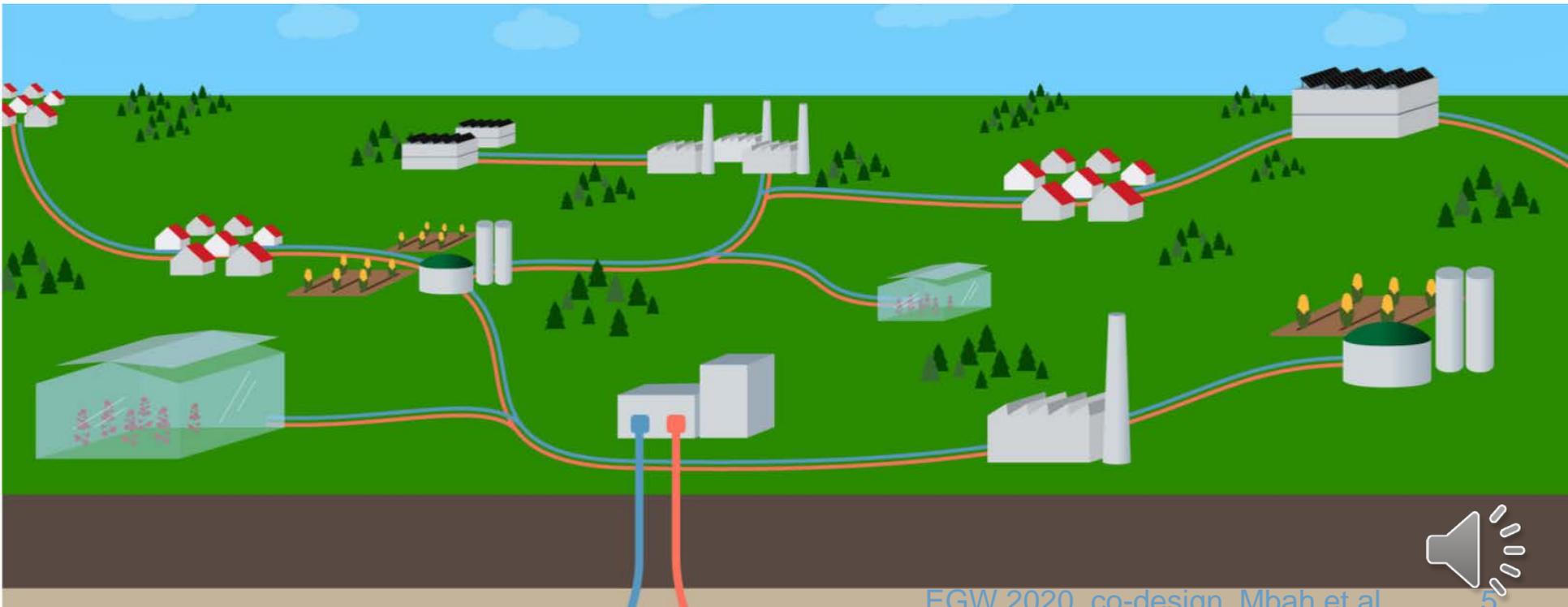


A participatory and transdisciplinary approach is promising to involve stakeholders at an early stage and take into account their knowledge, expectations, concerns and demands.



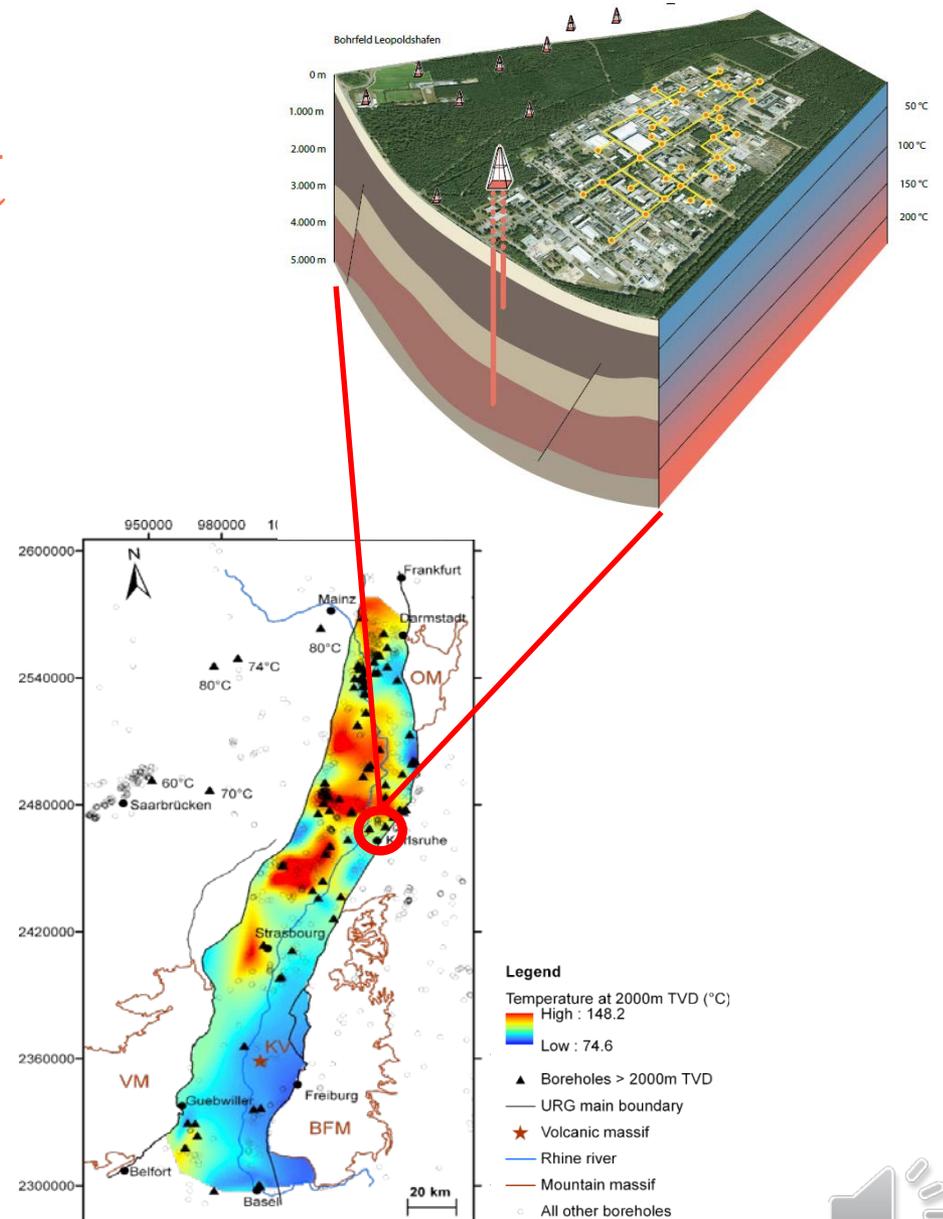
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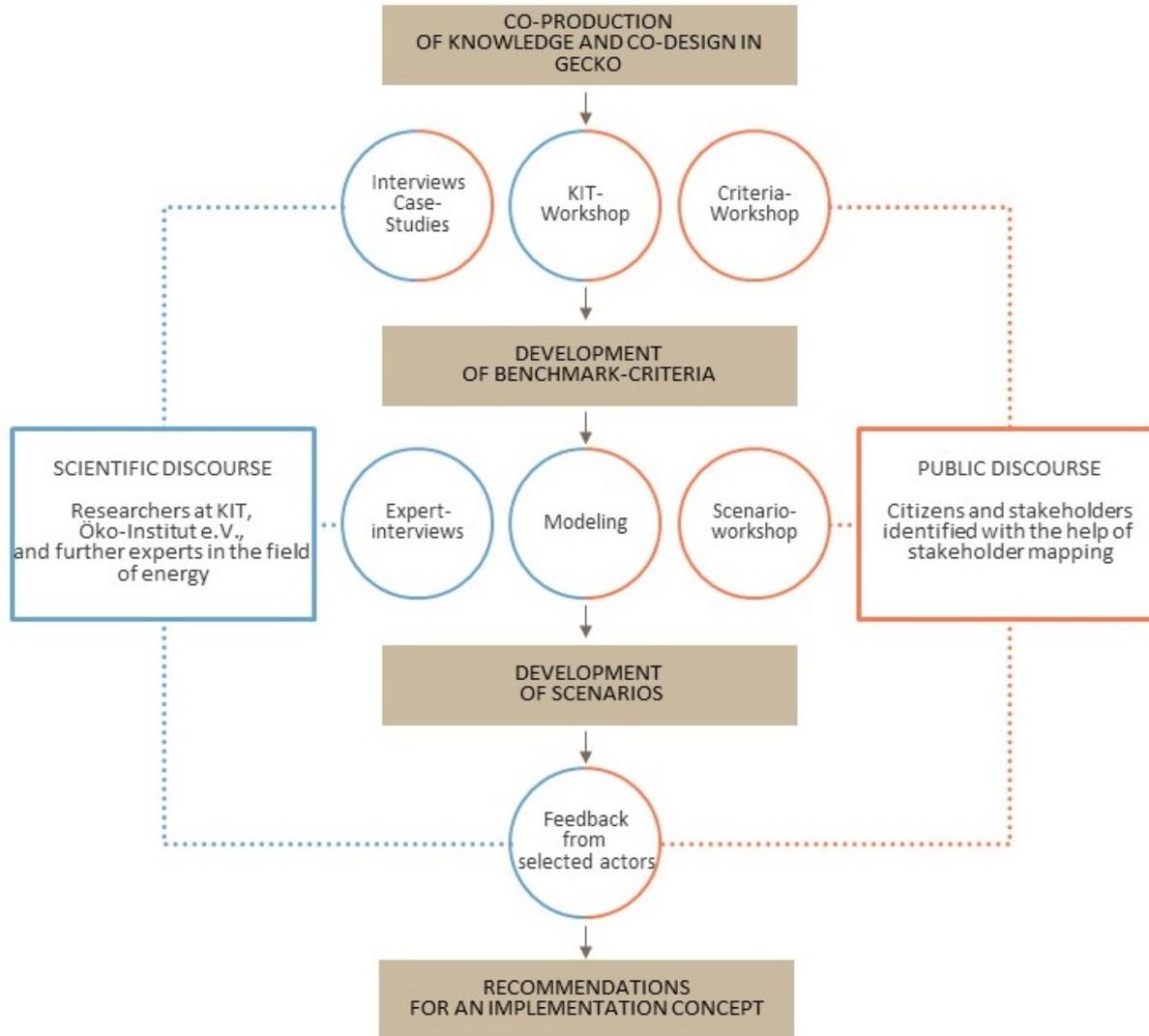
GECKO – Co-Production of Knowledge and Co-Design



GECKO Project

- In GECKO, recommendations for an implementation concept will be developed using the example of the KIT pilot plant
- KIT aims at carbon neutrality
- Site of the KIT Campus North, is characterized by one of the largest known heat anomalies in Germany (170°C at a depth of 3 km)
- A pilot plant is planned for the use of deep geothermal energy







Thank you for your attention!

