Smart retrofitting of urban housing in China and the Netherlands?

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Visualization of retrofit

Main question

What are the institutional and socio-technical conditions for citizen-inclusive retrofitting projects in urban retrofit provisioning in the Netherlands and China?

Conceptual framework

- Inclusive recruitment
- Inclusive delivery

Expected insights

- Social scientific insights in the role of residents in urban retrofitting projects and in the self-organising sustainable city of the future.
- Insights in the possibilities of residents to understand new techniques in retrofitted house.
- Insight in role of households in urban retrofit participation processes.
- More insight in changing residents practices towards a sustainable way of living.
- In conclusion: Towards the governance of energy domestic practices and empowerment of sustainable lifestyles at the household level.

Problem & context

- 33% of total CO₂ emission in China and the Netherlands is caused by buildings.
- 50% of total housing stock in China and the Netherlands requires urban retrofit.
- Proposition: the role of the residents is not optimally used in energy performance:
  - Retrofitting might be counterproductive if residents do not change everyday practices.
  - Chances are missed to differentiate, improve and adapt towards users’ needs and practices.

Study area

Inclusive recruitment

Methods

- Cases in Amsterdam (n=5)
- Cases in Mianyang (n=5)
- Semi-structured interviews (n=30-40)
- Observation and discussion (n=10)
- Focusgroups (n=120)